

From the Department of Women's and Children's Health  
Karolinska Institutet, Stockholm, Sweden

## Post abortion care in Uganda

Improving access and quality of care through task sharing and  
exploring the perspectives of young women and  
healthcare providers

Amanda Cleeve



**Karolinska  
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# Post abortion care in Uganda: Improving access and quality of care through task sharing and exploring the perspectives of young women and healthcare providers

## THESIS FOR DOCTORAL DEGREE (Ph.D.)

By

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To solidarity and sisterhood

## PREFACE

From an early age, I have been interested in social justice, equity and gender. As a young girl, social inequity and gender inequality filled me with anger, sadness and confusion as the solutions seemed so straightforward to me. To this day it still upsets me but by becoming a midwife and through my work in global health, advocating for sexual and reproductive health and rights, I have found a sense of purpose and a channel for my frustration. I first started working with abortion-related research during my master's thesis, which focused on abortions among female sex workers in Laos. We spent weeks talking to sex workers and pimps and visiting brothels. My interest and understanding of the topic of unsafe abortion grew exponentially during this time and when offered to go to Uganda to continue working in this field of research, the answer was YES.

On one of my first field trips to a rural clinic in Uganda, not yet a midwife, I ended up observing an emergency caesarean section. The patient was a woman with a ruptured uterus in term pregnancy. This was her seventh pregnancy. She had gone to a traditional birth attendant who had induced labour with herbs. From there it had all gone terribly wrong. The baby had died in-utero and I watched as a full grown baby boy with bluish pale skin was wrapped up in colourful African fabric. I can still smell the blood and hear the sound from the birds that were flying in and out of the broken windows. My colleague, Dr Susan Atuhairwe, saved the woman's life and indirectly, perhaps also the lives of her children waiting for her at home. I knew then I had to become a midwife to fully comprehend what had happened that day and why, and to be able prevent such things from happening again.

During my time in Uganda, through research and midwifery, I have experienced a lot of joy. I have also experienced grief, frustration and anger. I am in awe at the health workers who, despite the challenges working in this setting entail, continue day in and day out to provide care to those in need. I am also in awe at the resilience, strength and determination of women in Uganda who overcome tremendous difficulties in order to access sexual and reproductive healthcare and exercise their rights. My hopes for this thesis are that it will shed light on the realities of young women and healthcare providers, and eventually improve access to high-quality post abortion care in Uganda and elsewhere.

# ABSTRACT

**BACKGROUND** Unsafe abortions in Uganda continue to cause significant harm to women's health and lives and pose a heavy burden on the health system. The consistent shortage and maldistribution of healthcare providers impede women's access to sexual and reproductive healthcare including post abortion care. Research and government reports indicate that access to post abortion care is inequitable and that the quality of care is sometimes poor. A task share between physicians and midwives in the diagnosis and treatment of 1<sup>st</sup> trimester incomplete abortion using misoprostol, has the potential to increase women's access to care. Improving access and quality of care further demands better appreciation of abortion decision-making and care-seeking, as well as clarity surrounding the quality of post abortion care and aspect that contribute to sub-standard care.

**AIM** The aim of this thesis is to identify means to improve access and quality of post abortion care in low-resource settings through task sharing and by exploring the perspectives of young women and healthcare providers in Uganda.

**METHODS** **Study I** was a multi-centre randomised controlled equivalence trial carried out in the central region of Uganda. The study aimed to investigate the safety, effectiveness and acceptability of diagnosis and treatment of 1<sup>st</sup> trimester incomplete abortion with misoprostol provided by midwives compared with physicians. **Study II** focused on the perspectives of young women (15–24 years) seeking post abortion care. The study explored reproductive agency in relation to unsafe abortion through individual in-depth interviews. We wanted to understand how the social environment shaped young women's reproductive agency and actions, and under what circumstances abortions were conducted and post-abortion care was sought. **Study III** focused on healthcare providers' perspectives on post abortion care. Individual in-depth interviews were conducted with midwives providing post abortion care. We specifically wanted to shed light on the quality of care, including working conditions and the role of stigma.

**FINDINGS** We found that diagnosis and treatment of 1<sup>st</sup> trimester incomplete abortion with misoprostol was safe, effective and acceptable when care was provided by midwives compared with physicians. Women's acceptability was high and influenced by treatment experience and outcome (**Study I**). Interviews with young women revealed that reproductive agency was constrained and heavily influenced by stigma. Abortion was described as their least-wanted yet only option. At the same time, abortion was depicted as an agentive action intended to reclaim control. Maintaining secrecy was key but also incurred risk taking, and

when experiencing complications, many women struggled to access care. The abortion experience seemed to shape discourse in relation to contraceptive intentions and decision-making (**Study II**). We found that midwives were dedicated to prevent mortality and morbidity and considered post abortion care an essential part of midwifery. However, midwives' personal morality conflicted with their professional duty and commitment to provide post abortion care of good quality. Together with a challenging work environment, this hampered the provision of good-quality care. Finally, we found that stigma extended to both healthcare providers and women seeking care, especially to women who had induced an abortion (**Study III**).

**CONCLUSIONS** Scaling up task sharing with midwives in post abortion care using misoprostol is safe, effective and highly acceptable to women and can improve access to care (**Study I**). Enabling young women's reproductive agency requires addressing harmful gender norms and stigma related to pregnancy and abortion. Improving access to safe abortion and contraceptives is paramount to young women's empowerment and their sexual and reproductive health and rights (**Study II**). Safeguarding equitable and good-quality post abortion care requires an enabling environment and strengthening of the midwifery role. Furthermore, abortion stigma and its implications for both healthcare providers and care-seeking women must be addressed (**Study III**). Findings from this thesis may be used to guide future endeavours to improve access and quality of post abortion care, and to promote and protect the sexual and reproductive health and rights of young women.

## LIST OF SCIENTIFIC PAPERS

- I. Klingberg-Allvin M\*, Cleeve A\*, Atuhairwe S, Tumwesigye NM, Faxelid E, Byamugisha J†, Gemzell Danielsson K†. Comparison of treatment of incomplete abortion with misoprostol by physicians and midwives at district level in Uganda: a randomised controlled equivalence trial. *Lancet*. 2015;385(9985): 2392–8.
- II. Cleeve A, Byamugisha J, Gemzell Danielsson K, Tumwesigye Mbona NM, Atuhairwe S, Faxelid E, Klingberg-Allvin M. Women’s acceptability of misoprostol treatment for incomplete abortion by midwives and physicians – Secondary outcome analysis from a randomized controlled equivalence trial at district level in Uganda. *PLoS One*. 2016;11(2): e0149172.
- III. Cleeve A, Faxelid E, Nalwadda G, Klingberg-Allvin M. Abortion as agentive action: reproductive agency among young women seeking post-abortion care in Uganda. *Culture, Health and Sexuality*. 2017;19(11):1286–1300
- IV. Cleeve A, Nalwadda G, Zadik T, Sterner K, Klingberg-Allvin M. Morality versus duty – A qualitative study exploring midwives’ perspectives on post abortion care in Uganda. *Manuscript under review*.

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## LIST OF ABBREVIATIONS

CI	Confidence Interval
CSOs	Civil Service Organisations
D&C	Dilatation and Curettage
FDG	Focus Group Discussion
GBV	Gender Based Violence
ICPD	International Conference of Population and Development
IDI	In-Depth Interview
ITT	Intention-To-Treat
HC	Health Centre
HCP	Healthcare provider
HIV	Human Immunodeficiency Virus
HRH	Human Resources for Health
HSDP	Health Sector Development Plan
LARCs	Long Acting Reversible Contraceptives
MMR	Maternal Mortality Ratio
MDGs	Millennium Development Goals
MoH	Ministry of Health
MVA	Manual Vacuum Aspiration
NGO	Non-Governmental Organisation
OR	Odds Ratio
PAC	Post Abortion Care
PP	Per Protocol
RCT	Randomised Controlled Trial
RMNCAH	Reproductive Maternal Neonatal Child Adolescent Health
SAE	Serious Adverse Event
SARCs	Short Acting Reversible Contraceptives
SDGs	Sustainable Development Goals
SRH	Sexual and Reproductive Health
SRHR	Sexual and Reproductive Health and Rights
UHC	Universal Health Coverage
UN	United Nations
VAS	Visual Analogue Scale
WHO	World Health Organization



# 1 INTRODUCTION

## 1.1 REPRODUCTIVE RIGHTS ARE HUMAN RIGHTS

Sexual and reproductive health and rights (SRHR) are strongly connected to gender equality and to women's health and well-being and therefore fundamental to sustainable development (1, 2). Despite remarkable gains in relation to SRHR in the last few decades, hundreds of millions of girls and women still lack the capacity to make safe decisions about their bodies (2). Reproductive rights rest on 'the recognition of the basic rights of all couples and individuals to decide freely and responsibly the number, spacing, timing of their children and to have the information and means to do so, and the right to attain the highest standard of sexual and reproductive health', as stated in the programme of action from the International Conference on Population and Development (ICPD) in Cairo in 1994 (3). The conference marked a paradigm shift, where international strategies and consensus surrounding population and development moved away from a focus on population control and demographic-centred policies, toward a global agenda that framed women's health and rights and empowerment as central to sustainable development (4). The ICPD and the Fourth World Conference on Women in Beijing (1995) initiated positive changes: United Nation (UN) bodies, governments, non-governmental organizations (NGOs) and civil society organizations (CSOs), adopted policies that recognized access to sexual and reproductive healthcare as a basic human right (4). Women's health movements played an important role in initiating this paradigm shift, which followed years of working toward a global recognition of SRHR as a human right (5). Abortion was a contentious issue during the ICPD. Chapter 8.25 of the final 1994 document recognises unsafe abortion as a major public health concern, but it only goes as far as urging governments to make abortions safe 'where legal' and does not address abortion as a human right. However, when it came to post abortion care (PAC), the focus of this thesis, it states that 'in all cases, women should have access to quality service for the management of complications arising from abortion' (6).

The UN have asserted its stance in relation to safe abortion. In 2013, the UN Special Rapporteur on Health urged governments to ensure access to safe abortion and PAC, as criminalisation and lack of access violated women's rights and resulted in poor health (4). More recently, the UN Committee on Economic, Social and Cultural Rights declared that SRHR was indivisible from the right to health and encompass 'the right to make free and responsible decisions and choices, free of violence, coercion and discrimination, over matters concerning one's body and sexual and reproductive health' (7).

Six years after the ICPD, the UN established its Millennium Development Goals (MDGs) and set ambitious targets to reduce global maternal mortality. Some argue that the compromise and following omission of SRHR in the MDGs undermined the agenda advocates fought for in Cairo and constituted the reason why many countries failed to reach MDG5, the goal concerned with maternal mortality (4). The UN Sustainable Development Goals (SDGs) 2030, initiated in 2015, are more comprehensive than the MDGs with its 17 goals. Goal number 3 and 5 are especially relevant to this thesis. SDG 3 focuses on health with goal 3.7 aiming to reduce the maternal mortality ratio to less than 70 per 100,000 live births by 2030. SDG 5 focuses on gender equality, with goal 5.6 specifically aiming to ensure universal access to SRHR in accordance with the ICPD and Beijing documents, by 2030 (8). The success of the Sustainable Development Agenda (Agenda 2030) will depend on nations' commitment to reducing inequities in health and subsequent investment in women's, children's and adolescents' health and lives. The UN Global Strategy for Women's, Children's and Adolescents' Health provides guidance on how to accelerate progress toward universal health coverage (UHC) and Agenda 2030, listing safe abortion and PAC as high-return priority interventions (9). The UHC movement is a cornerstone of Agenda 2030, with the promise that no one will be left behind in terms of healthcare access. However, a recent report by the Guttmacher–Lancet Commission on SRHR stresses that UHC efforts have neglected issues such as adolescent sexuality, abortion and gender-based violence (1). Recently, the Partnership for Maternal Newborn and Child Health launched a call for action, asking the international community and governments to adopt and endorse a comprehensive package of SRHR interventions, including safe abortion and PAC, to be delivered through UHC schemes (10). In the meantime, abortion remains a neglected and politicised issue that is rooted in poverty and social inequity (1, 11). This is highlighted by the Mexico City policy the US government recently imposed – also known as the ‘global gag rule’, which is having a negative effect on access to SRH care in general and abortion and contraception in particular (12).

Improving access to quality abortion care means improving the health and lives of millions of women (13); it is the premise on which this thesis rests. The understanding of sexual and reproductive rights as human rights and the right to bodily integrity – underpins this thesis and is my point of departure into the field of reproductive health in Uganda.

## 2 BACKGROUND

### 2.1 MATERNAL MORTALITY AND MORBIDITY

The World Health Organization (WHO) defines maternal mortality as ‘the death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the duration and site of the pregnancy, from any cause related to or aggravated by the pregnancy or its management but not from accidental or incidental causes’ (14). Maternal deaths are identified based on a division into direct and indirect causes. Causes of direct maternal deaths include obstetric complications in pregnancy and the postpartum period while indirect maternal deaths are deaths resulting from a previously existing underlying disease or a condition aggravated by the pregnancy state. The major causes of direct maternal mortality are haemorrhage, infection, hypertension, obstructed labour and unsafe abortion (15). The global maternal mortality ratio (MMR), measured in maternal deaths per 100,000 live births, declined nearly 44% between 1990 and 2015. The number of maternal deaths decreased from approximately 532,000 (496,000–590,000) in 1990 to 303,000 (291,000–349,000) in 2015 (14, 16). Despite significant improvement in maternal survival, most countries and regions did not reach MDG5. Global progress toward the elimination of preventable maternal deaths has been unequal, and major differences between and within regions and nations persist (17). In 2015, Sub-Saharan Africa accounted for the largest share of all global maternal deaths (66.3%), which corresponds to 201,000 deaths (14, 16).

Measuring abortion-related mortality presents a unique challenge, as abortion is more likely to be misclassified or reported as unknown than other causes of maternal deaths. Moreover, in settings where abortion is legally restricted and or stigmatised, individuals and healthcare facilities may be unwilling to participate in verbal autopsies and facility surveys (18). In 2008, the WHO estimated that abortion contributed to 13% of global maternal mortality, causing 47,000 deaths per year between 1990 and 2008. The highest proportion of maternal deaths due to unsafe abortion was found in East Africa (18%) where unsafe abortion contributed to 13,000 maternal deaths in 2008 (19). More recent efforts to quantify causes of maternal deaths have resulted in divergent estimates concerning the attribution of abortion, illustrating the difficulties in measuring abortion-related mortality (18). Say et al. estimated that abortion represented 8% of global maternal mortality between 2003–2009 (15), whereas Kassebaum et al. estimated the number to be 15% during 1990–2013 (20).

The global burden of abortion-related morbidity is even harder to quantify but is thought to be much greater than the burden caused by abortion-related mortality (21, 22). Findings from

a recent systematic review suggest that a considerable share of all women admitted for abortion-related complications have potentially life threatening complications. At least 9% of abortion-related hospital admissions had a near-miss event and about 1.5% ended in death (23). Guttmacher Institute estimated that almost 7 million women were treated for abortion complications in 26 developing countries in 2012. Uganda, Kenya and Malawi had the highest number of women treated for abortion complications among all countries included in the analysis (24).

## **2.2 ABORTION INCIDENCE AND SAFETY**

Unintended pregnancy and poor access to legal and safe abortion underpin the issue of unsafe abortion (25, 26). Since 1990, unintended pregnancy rates have declined worldwide, with the biggest reductions occurring in developed regions. From 2010–2014, around half (56%) of all unintended pregnancies ended in abortion (27). From 1990–2014, abortion rates declined significantly in developed countries, from 46 to 27 per 1,000 women of reproductive age (15–44); however, the rate in the developing world remained almost the same, decreasing only from 39 to 37 per 1,000 women. The annual number of abortions worldwide increased by almost six million from 50.4 in 1990 to 56.3 million in 2014. This increase was caused by population growth over these years (28). The discrepancy between developed and developing regions reflects inequalities in access to SRH care in general and effective contraception in particular (28, 29).

The WHO defines unsafe abortion as ‘a procedure for terminating an unintended pregnancy either carried out by people lacking the necessary skills or in an environment that does not conform to minimal medical standards, or both’. The interpretation of this definition is not static – meaning it evolves as advancements in science and technology are made. The skills and medical standards that are considered to be safe also change whether it is a surgical or a medical abortion and is dependent on gestational age (30). The WHO has provided clarification on how to operationalise and interpret its concept of unsafe abortion. Abortion safety is not a binary concept – rather, it can be characterised along a risk continuum that is influenced by the social and legal context (31). In 2017, the WHO published new estimates on global abortion safety that attempted to provide a more nuanced gradation of safety, taking both legal and social contexts into consideration and aligning with the WHO definition of unsafe abortion (32, 33). The WHO used a three-tiered classification system focused on two aspects that may determine abortion safety: the healthcare provider (HCP) and the abortion method. It categorised abortions into safe, less safe and least safe, with the latter two



combined representing unsafe abortions. Each year from 2010–2014, an estimated 55.1 million abortions occurred. Of those, 55% were safe (done using a recommended method and by a trained provider), 31% were less safe (done by either a recommended method or a trained provider) and 14% were least safe (done by an untrained provider and/or not a recommended method). This means that around 25 million abortions (45%) were unsafe (less and least safe). Almost all (97%) of those occurred in developing countries (32). Furthermore, the authors estimated that only one in five (21.8%) abortions were safe in low-income countries compared with 67% in upper-middle-income countries and 82% in high-income countries (32).

### **2.3 ACCESS TO ABORTION CARE**

The WHO emphasises the importance of the legal and social context for abortion safety (31, 32). Maintaining a restrictive abortion law or arguing for increasing legal restrictions are often made on the premise that doing so will reduce abortion rates. However, when comparing global abortion rates among countries where abortion is prohibited all together or to save a woman's life with countries where abortion is available on request, the rates are almost equal – 37 versus 34 per 1,000 women aged 15–44, respectively (28). Instead of decreasing demand for abortion, restrictive abortion laws result in abortions becoming unsafe and clandestine (26, 32). The link between legality and access to safe abortion is, however, not totally clear. This is exemplified by the fact that women with resources can, in most cases, access safe abortion care irrespective of the legal status of abortion where they live (11, 13). Other factors within the social context that impact abortion safety include the availability of trained HCPs and evidence-based treatments and guidelines (31, 34), attitudes of HCPs and their willingness to provide abortion-related care (35), stigma and gender inequality (11). Gender inequality impairs women's decision-making power and restricts their access to SRH care and information (18, 36). Stigma impacts access to abortion care by discouraging both care-seeking and care-giving and has a negative impact on quality of care (37). When women experience complications, fear of legal repercussions and stigmatisation are common reasons for delayed care-seeking or not seeking care at all (38).

Inequity in access to abortion care between rural–urban residence and between poor and non-poor status is pronounced across contexts with restrictive abortion laws. Poor and rural women are not only vulnerable to unintended pregnancy, they are also more likely to resort to unsafe abortion methods, more likely to develop complications and less likely to access PAC, when compared with non-poor urban women (29). Furthermore, adolescent girls are known

to face significant challenges in accessing good-quality SRH (39) which renders them vulnerable to unsafe abortion. In 2008, 41% all unsafe abortions that occurred globally were estimated to be among women aged 15–24. Almost half of all unsafe abortions that occurred among girls aged 15–19 (3.2 million) were in the African region (40).

## 2.4 ABORTION STIGMA

Stigma has been described as potentially the most understudied yet pervasive means by which abortion impacts women's health and well-being (1). In 1963, Goffman defined stigma as 'an attribute that is deeply discrediting that reduces the bearer from a whole person to a tainted and discounted one'. The term stigma concerns the disgrace itself rather than any bodily evidence of it. This means that stigmatised behaviours do not have to be visual in order to be stigmatised. Goffman highlights one prominent characteristic of stigma which is its contagiousness (41). Link and Phelan (2001) further conceptualised stigma and highlighted the essentiality of power to the social production of stigma. They state that 'stigma exists when elements of labelling, stereotyping, separation, status loss, and discrimination occur together in a power situation that allows them'. While stigma is entirely reliant on social, economic and political power, stigma perpetuates power differentials and so creates a vicious circle (42). Stigma can be divided into *perceived*, *experienced* and *internalised* stigma. *Perceived stigma* refers to the degree an individual expects that others would degrade or discriminate against them for engaging in a behaviour or possessing a specific attribute. *Experienced stigma* concerns the concrete experience of being discriminated against, while *internalised stigma* is the extent to which an individual who is stigmatised incorporates negative perceptions or beliefs into his or her identity (38, 43). Common displays of internalised abortion stigma are shame and guilt (38).

Kumar et al. define abortion stigma as 'a negative attribute ascribed to women who seek to terminate a pregnancy that marks them, internally or externally, as inferior to ideals of womanhood'. With ideals of womanhood, the authors refer to concepts such as procreation, motherhood and fertility (37). In its essence, abortion challenges a moral order that expects all women to want to be mothers, and the idea that a woman's principal role is to bear children (44). In contexts where abortion is stigmatised, other behaviours such as premarital sex and pregnancy are seen as signs of transgressions of established sexual norms, underlining the notion of female sexuality as the core of abortion stigma (37). Abortion stigma can be located in various spaces and on various levels (37, 45). On a governmental level, laws and policies may reinforce and legitimise values and morality within societies. In

this sense, restrictive laws and policies on abortion contribute to abortion stigma (36). On an institutional level, stigma may impact HCPs' attitudes and willingness to provide abortion-related care; it may also cause an absence of evidence-based guidelines and training as well as poor quality of care. On the individual level, stigma may affect women's access to SRH care and contribute to unsafe and clandestine abortions and internalised stigma (45).

## 2.5 POST ABORTION CARE

PAC is an effective intervention for decreasing maternal mortality and morbidity owing to abortion (46–48). Notably, it has been identified as a priority intervention to improve women's well-being and to advance Agenda 2030 (49). The concept of PAC was first articulated in 1991 by Ipas. Three years later in 1994, the first PAC model was developed, comprising three components. The model was developed as a means of addressing the harmful consequences of unsafe abortion without violating any abortion laws (47). Following the ICPD in 1994, during which women's rights in relation to PAC access were ascertained, countries started to formally introduce PAC programmes (50). Since then the model has been developed further and now comprises five essential elements, illustrated in Table 1 (48). The expansion of the model, in which the elements 'counselling' and 'community and service provider partnership' were added, was driven by a perceived need for a more prevention-oriented model (50). Challenges to the implementation of the PAC model include availability of trained HCPs; procurement and supply mechanisms; and restrictions, including social, religious, policy and legal restrictions, in relation to abortion, contraception and PAC.

Table 1. The PAC model

<b>Essential elements of PAC</b>	
1	Treatment of complications owing to spontaneous or induced abortion
2	Post abortion contraceptive counselling and provision
3	Counselling to respond to women's emotional and physical needs
4	Linkages to reproductive or other health services
5	Community and service provider partnership

PAC can be divided into basic and comprehensive based on a set of signal functions. Both basic and comprehensive PAC include the following signal functions: removing products of conception; administering parental antibiotics, uterotonics and intravenous fluids; staff members who are available 24 hours per day, 7 days per week; and contraception

counselling. Basic PAC also includes communication with referral facilities and vehicles with fuel to transfer patients. Comprehensive PAC further includes administration of blood transfusion and the capacity to undertake major abdominal surgery (51).

Incomplete abortion stemming from induced or spontaneous abortion, is a common complication managed in PAC (47). Severe complications such as septic and haemorrhagic shock, trauma to the genital tract, uterine rupture, perforation of the intestines and peritoneum, pelvic inflammatory disease and secondary infertility, are often consequences of unsafe abortion (26). Living in a malaria endemic area, being HIV positive and experiencing physical violence during pregnancy increase the risk of spontaneous abortion and related complications (52). Traditionally, incomplete abortion has been managed using surgical interventions such as dilatation and curettage (D&C) and manual vacuum aspiration (MVA) (46, 53). It has been established that MVA and the prostaglandin E1 analogue misoprostol have similar efficacy rates when used for 1<sup>st</sup> trimester incomplete abortion (53). A study from Uganda comparing MVA and 600µg oral misoprostol showed a success rate of 96% for misoprostol (54). The WHO now recommends either MVA or misoprostol for the treatment of incomplete abortion in the 1<sup>st</sup> trimester of pregnancy. It recommends against the use of D&C due to safety concerns (30). Misoprostol was first developed for the prevention and treatment of gastric ulcers; it is now widely used in obstetrics and gynaecology for its utero-tonic effects and ability to soften the cervix (55). In March 2011, the WHO added it to its list of essential medicines (56). Misoprostol has many indications, including the induction of labour, the prevention and treatment of postpartum haemorrhage, cervical priming, incomplete abortion and induced abortion (55). Furthermore, the drug has several benefits – it is easy to store and administer, it is heat-stable, has few side effects, and it is widely available and usually inexpensive (55). These advantages make misoprostol highly suitable for use in low-resource settings (57). Non-surgically skilled HCPs can easily administer misoprostol and perform MVA at lower-level healthcare facilities, which has the potential to increase access to PAC and lower health system costs while reducing the burden on higher-level facilities (46, 53, 58). An increase in global availability of misoprostol has driven reductions in maternal mortality and lowered the frequency of severe complications (29, 34).

## **2.6 HUMAN RESOURCES FOR HEALTH**

The importance of the health workforce in improving population health is well established (59). Human resources for health (HRH) are essential to achieve UHC– simply put, that all members of society can access and obtain quality healthcare without risking financial

hardship (60). Furthermore, HRH are key to achieving UHC and Agenda 2030 (59). Many countries suffer from an insufficient skills-mix and maldistribution of HCPs. This maldistribution is often characterised by urban concentration and rural deficiencies. In addition, many HCPs are faced with overwhelming work environments characterised by low pay, weak management, and few opportunities for career development, resulting in high attrition rates and poor performance (61). The WHO recommend a density of 22.8 midwives, nurses and physicians per 10,000 people. The recommended density is a threshold for achieving a relatively high coverage of essential healthcare interventions. The WHO also recommends a coverage of skilled birth attendants of more than 80% (61). Low-income countries in particular struggle to achieve these recommendations (59). According to the WHO, many countries are making progress with regards to health worker availability, but the progress is not occurring quickly enough to keep up with population growth and health needs (62).

### **2.6.1 Midwifery and abortion care**

Midwives play an important role in the provision of high-quality maternal care (63, 64). In fact, midwifery has been associated with more efficient use of resources and positive health outcomes when care is provided by educated, trained, licensed and regulated midwives (63, 65). Universal access to midwifery, including contraceptive services, has been estimated to be able to potentially avert 83% of maternal and neonatal deaths and stillbirths globally (66). Thus, increasing access to and coverage of quality midwifery care is crucial to achieving national and international targets for reproductive health (64).

All through history, SRH care has included abortion, often provided by midwives (67). The International Confederation of Midwives support midwives' involvement in abortion-related care. Their position statement on the provision of abortion-related services is as follows: 'a woman who seeks or requires abortion-related services is entitled to be provided with such services by midwives'. Furthermore, it states that midwifery education should include training in abortion-related care (68). The importance of midwives and nurses in the provision of abortion care, including PAC, has gained increasing recognition (58). The need to mitigate the health worker crisis and to simplify abortion care through de-medicalisation has driven the expansion of their roles in abortion-related care (58, 69). Studies have established midwives' ability to perform 1<sup>st</sup> trimester induced abortions in both high- (70), middle- and low-income settings (71, 72) and suggested that midwives are also competent to provide PAC (73–75).

## **2.6.2 Task shifting and sharing**

In Africa, the health worker shortage is greatest in rural areas where the burden of disease is highest (76–78). The strategic and pragmatic shifting and sharing of tasks with nurses and midwives have been described as mitigating human resource problems in obstetric and gynaecological care and leading to positive health outcomes (74, 79, 80). Task shifting, refers to the process of delegating tasks, where and when appropriate, to HCPs with shorter training and fewer qualifications (81). The concept, which was previously known as ‘substitution’, has gained increasing attention since the early 21<sup>st</sup> century. Although the task shifting was not new at the time, it was given new importance and urgency because of an accelerated health worker crises and an ongoing HIV epidemic in many African countries in particular (77). The practice of task shifting aims to optimise the roles of available human resources by redistributing tasks among health workforce teams (76, 82). The concepts of *task shifting* and *task sharing* are often used synonymously, although they do not necessarily mean the same thing. Task sharing means that tasks are shared; task shifting refers to tasks being moved (83). Task shifting and sharing may increase access to reproductive health services without compromising quality of care (82) and has the potential to enable countries to build more equitable and cost-effective health systems (77). However, task sharing and shifting also come with challenges and require investment, supportive regulations, policies and guidelines, and continuous clinical support provided to those involved in the process (77).

For the purpose of this thesis, I have chosen to use the term *task sharing*, emphasising the importance of teamwork and the fact that HCPs are often dependent on effective collaboration across and between cadres. Task sharing in this thesis thereby refers to the process of sharing tasks, where and when appropriate, with less specialised HCPs. By using the term task sharing I am not disregarding settings staffed with only one HCP, as the aspect of sharing also occurs through consultations and referrals.

## **2.7 THE UGANDAN CONTEXT**

### **2.7.1 Demographics**

Uganda is a land-locked low-income country in East Africa. The state was declared independent from British rule in 1962 (84). The population is rapidly growing, with an annual growth of about 3% – in 2017, the population reached 42.8 million (85). When I first travelled to Uganda in 2013, the population was 37.5 million. About 76% of the population live in rural areas; however, urban populations are steadily growing with 5.8% per year (85). Uganda has one of the youngest age structures in the world, with almost 50% of the

population aged 15 years or below. About 21% of the population constitute women of reproductive age (86). Notably, the proportion of women of reproductive age increased by 40% between 2003 and 2013 (87). The population is made up of various ethnic groups with unique customs and social norms. The largest religious group are Catholics (40%), followed by Anglicans (32%) and Muslims (14%). Almost 70% of the working population are engaged in subsistence agriculture (88). There are large disparities in wealth and health across the country and between urban and rural areas. Poverty is pronounced in rural areas, where the majority of the population lives (84).

### **2.7.2 Health system challenges and strengthening**

In Uganda, healthcare access and geographical access in particular, is increasing. Currently, more than 80% of the population live within a 5 km radius of a healthcare facility. Still, healthcare utilisation is poor (89). This is attributed to poor infrastructure, lack of supplies including essential medicines, a shortage of health workers, low pay, unofficial patient fees, long waiting times and poor interpersonal skills among some HCPs (89, 90). Financing for healthcare is a huge challenge, and out-of-pocket payment remains high at around 40%. Though public healthcare is supposedly free of charge, informal payments are common (89, 91). A major and consistent bottleneck to healthcare access is the critical shortage and maldistribution of HCPs (76, 91). Practicing physicians are concentrated to the central urban region, while the rest of the country where the majority of the population live, suffer from severe shortages. There is also a lack of midwives and nurses, although these cadres exist in greater numbers and are less unevenly distributed when compared with physicians (64, 91, 92). Task shifting and sharing have been utilised for a long time and on a wide scale to mitigate the country's human resource crisis; however, these practices often occur informally without any supporting structures (92).

The government of Uganda recognises the need to scale up the availability of HCPs; it also recognises the critical role of nurses and midwives. Efforts to increase the size of the health workforce are therefore a national priority (93) and have resulted in the increased availability of nurses and midwives in particular (89, 93). Quality improvement efforts, including increased availability of HCPs, essential medicines and effective interventions, have led to positive maternal and child health outcomes (94). A good example is the proportion of women giving birth with the help of a skilled birth attendant, which increased from 42% to 74% from 2006 to 2016. Another example is the under-five-year mortality rate, which decreased from 128 to 64 deaths per 1,000 children between 2006–2016 (91). Still, the rapid population growth and consistent health challenges means that there is an on-going struggle

to meet the population's health needs. In addition, the introduction of new interventions and the modification of clinical guidelines have not been paired with improvements in HCPs competences. The Uganda Ministry of Health (MoH) has emphasised the need for enhanced accountability and stronger leadership as well as an increased focus on patient-centred care in order to improve quality of care and health outcomes (91).

### **2.7.3 Reproductive health**

Uganda's guiding framework for planning and implementing health sector activities is set out in the Health Sector Development Plan (HSDP) 2015/16–2019/20. The overall goal of the HSDP is to accelerate progress toward UHC and to ensure access to good-quality health services for everyone without the risk of financial hardship (95). Reproductive, maternal, neonatal, child and adolescent health (RMNCAH) is a main focus of the government's strategy to improve population health and development, as set out in the MoH RMNCAH Sharpened Plan 2017 (91, 95). Uganda's efforts to eliminate preventable maternal mortality resulted in a commendable 33% reduction of the MMR from 1990–2015. Still, it was not enough to reach MDG5 (91, 96). From 2011–2016, the MMR reduced from 483 maternal deaths per 100,000 live births (CI 95% 368–507) to 368 maternal deaths per 100,000 live births (CI 95% 301–434) (96). Although these numbers indicate a declining trend, the change is not statistically significant, and at its current rate, the country is unlikely to reach the global targets set out in the SDGs by 2030 (89, 91).

Uganda largely remains a pro-natalist society (97), yet a preference for a smaller family size is emerging – increasing with level of education (86, 96). Government efforts to improve the uptake of modern contraception have led to a large increase in uptake among married women from 18% in 2006 to 35% in 2016. However, the unmet need for contraception is still at 28% among married women and 32% among sexually active unmarried women. The increase in contraceptive use has not yet translated to an equally large decrease in fertility rates. The total fertility rate is declining, however slowly; in 2016 the total fertility rate was 5.4 children per woman compared with 6.7 in 2006 and 6.9 in 1995. The decline in adolescent pregnancy rate has, however, stagnated, with a quarter of adolescents being mothers or pregnant by the age of 19, indicating that access to SRH care is especially challenging for this age group (91, 96). The unintended pregnancy rate remains high and almost unchanged since the early 21<sup>st</sup> century, declining from 158 to 149 unintended pregnancies per 1,000 women aged 15–49 from 2003–2013. Regarding abortion, according to the latest estimates, the incidence decreased from 51 abortions per 1,000 women aged 15–44 in 2003, to 39 abortions per 1,000 women aged 15–44 in 2013 (87).



#### **2.7.4 Abortion laws and related policies**

Abortion in Uganda is legal in order to save the life and health of a pregnant woman. However, the country's penal code, a remnant from its colonial past, is unclear and not in harmony with the constitution (98, 99). Moreover, the National Policy Guidelines and Service Standards for Sexual and Reproductive Health and Rights, 2006, expands on circumstances when abortion is permitted, adding that abortion is legal in cases of rape, incest, foetal anomaly, if the woman is HIV positive or has cervical cancer (100). Because laws and policies concerning abortion are unclear and contradictory, civil society, law enforcement, the judicial system and the medical community interpret them inconsistently. Many interpret abortion to be completely illegal (98, 99) but in fact there is no absolute prohibition of abortion (98). Research has revealed limited awareness of the current abortion law among Ugandan opinion leaders such as policy makers, healthcare leaders and politicians (101). Ultimately, HCPs may not be willing to provide abortion-related healthcare services, and women are not aware of their legal rights (99). The Protocol on the Rights of Women in Africa, also known as the Maputo Protocol, binds its signatories to ensuring access to SRH care, including access to abortion care. Moreover, the protocol urges governments to 'enact policies and legal frameworks to reduce the incidence of unsafe abortion' (102). While Uganda signed and ratified the Maputo Protocol in 2010, it declared its reservations about Article 14, which concerns access to safe abortion (98).

#### **2.7.5 Abortion mortality and morbidity**

Complications from unsafe abortions are one of the leading causes of maternal deaths (88), contributing to 11% of the country's maternal mortality. According to a review of maternal deaths occurring during 2012–2013, the proportion of abortion-related deaths was higher among adolescents compared with older women (103). Morbidity from unsafe abortion is also of great concern in Uganda. The annual rate of women treated for abortion complications was 12 per 1,000 women aged 15–49 in 2013; this is higher when compared with rates reported in nearby countries such as Kenya (9 per 1,000) and Rwanda (7 per 1,000) (87). Mortality and morbidity have consequences not only for the individual woman but also the well-being of her family; they include loss of productivity and negative impacts on household finances (104). In addition, high levels of abortion complications have consequences for the health system. The government of Uganda spends considerable resources on PAC. It was estimated that the government spent almost 14 million United States Dollars on PAC in 2010, corresponding to 4.1% of the country's total expenditure on health (105).

### **2.7.6 Post abortion care**

Uganda has listed PAC as an evidence-based and high impact-intervention that must be prioritised in order to end preventable maternal mortality (91). In 2015, the MoH launched standards and guidelines on how to reduce morbidity and mortality owing to unsafe abortion. The standards and guidelines were supported by existing laws and policies in Uganda and were evidence-based, – that is, anchored in the WHO guidelines for safe abortion (30, 106). The document provides guidance on the minimum standard of care that all healthcare facilities and HCPs must meet. Additionally, it clarifies the legal environment surrounding abortion and provides clinical guidance on safe abortion services and PAC (106). However, due to disagreement between stakeholders and opposition from religious leaders in particular, they were withdrawn in January 2016, and efforts to reinstate them have been unsuccessful (99, 107).

Misoprostol, MVA and D&C are methods used in PAC in Uganda. Existing data indicates that the use of misoprostol and MVA is steadily increasing and slowly replacing the use of D&C (87). The National Drug Authority first approved misoprostol in 2008 for the management of postpartum haemorrhage. In 2012, misoprostol was approved for the treatment of incomplete abortions and added to Uganda's essential medicines list (108). Successful implementation and scaling up the use of misoprostol in PAC requires support from ministries of health, supportive policies, updated clinical guidelines, trained HCPs and for women and communities to find the method acceptable (109). In Uganda, the implementation of misoprostol in PAC was facilitated by support from CSOs and the MoH. HCPs gave it a positive reception, as they found that it freed up provider time and decreased their workload, was easy to use and required minimal space and equipment. HCPs also perceived that many women preferred misoprostol over surgical interventions (110).

Findings from a pilot study conducted in the late 90's, suggested that midwives were competent to provide PAC using MVA (50). Subsequently, midwives and nurses were listed as eligible PAC providers in the National Policy Guidelines and Service Standards for Sexual and Reproductive Health and Rights, 2006 (100). In their efforts to improve access to PAC, the government has increased the number of HCPs trained in PAC (91, 108). Still, shortages of nurses and midwives trained in PAC persist, which means that access to care remains limited (87, 111, 112). Access also varies greatly across the country. In 2013, 89% of the 2274 facilities with the potential to provide PAC, did so. The lowest availability of facilities that provided PAC were found in the north-eastern region of Karamoja and highest availability was found in the central region. Conversely, the central region had the lowest

number of beds available for PAC patients (87). The quality of PAC is also a concern. Government reports and research indicate that the quality of PAC is often inadequate, and that patients receiving PAC are not managed appropriately (51, 91, 111, 113, 114). Stock shortages and the intermittent supply of misoprostol and MVA kits are continuous challenges (110), which is especially noticeable in rural areas and lower-level facilities (114, 115). In addition, research have indicated that some PAC providers have negative attitudes towards their patients that are rooted in their dislike for abortion (112, 116).

### **2.7.7 Gender and abortion**

Gender influences girls and women's SRHR, their decision-making and autonomy. It also impacts life opportunities and the allocation of resources such as healthcare, income and education (1, 49). For the purpose of this thesis, I have chosen to understand gender in accordance with *relational gender theory*. According to this theory, gender is a structure of social relations centred around reproduction (also known as gender relations) and 'the set of practices that bring reproductive distinctions between bodies into social processes' (117). It embraces economic-, power-, affective- and symbolic relations, whilst operating at the intrapersonal, interpersonal and societal levels (117, 118). This way of looking at gender, as a complex social construct, is at odds with how science often think of gender, as a binary classification of bodies (118).

Gender inequality is rooted in patriarchy, which sculpts unequal power relations and inhibits autonomy (36). Prevailing gender dynamics in Uganda negatively affect women's utilisation of and access to healthcare, access to resources and division of labour (119). Gender norms often create double standards that position women as subordinate and men as dominant; this results in power asymmetries and sexual vulnerability (120). Gender norms in Uganda have been shown to disadvantage young girls and put them at a heightened risk of transactional sex, coerced sex, violence, HIV-infection and unwanted pregnancy (121). Pregnant adolescents face many difficulties including disrupted education, stigma, and violence (122). Gender based violence (GBV) is a great concern in Uganda. More than half of women aged 15–49 have ever experienced physical violence; the most common perpetrator being a current or previous partner (96). GBV is in turn a risk factor for unwanted pregnancy and abortion (123).

Abortion is generally viewed with disdain in Uganda, with the antagonism towards abortion rooted in religion and conservative gender norms (124). Men's attitudes towards abortion largely mirror prevailing societal norms that find abortion unacceptable (97). However,

researchers have also reported male support for abortion and active involvement in abortion – as instigators, collaborators, facilitators, supporters and punishment givers – highlighting the critical role men play in women’s access to abortion care (125). For many men, the notion of men’s superiority over women and women’s primary role as birth givers and homemakers remain undisputable. Yet, research also point to and ongoing shift in gender discourses and indicates that other conceptions of masculinities that support a more progressive outlook on gender equality, are emerging (126).

The government of Uganda recognises gender equality as a crosscutting enabler of socio-economic development. Efforts to advance gender equality have translated to increased participation of women in parliament and increased school enrolment of girls (127).

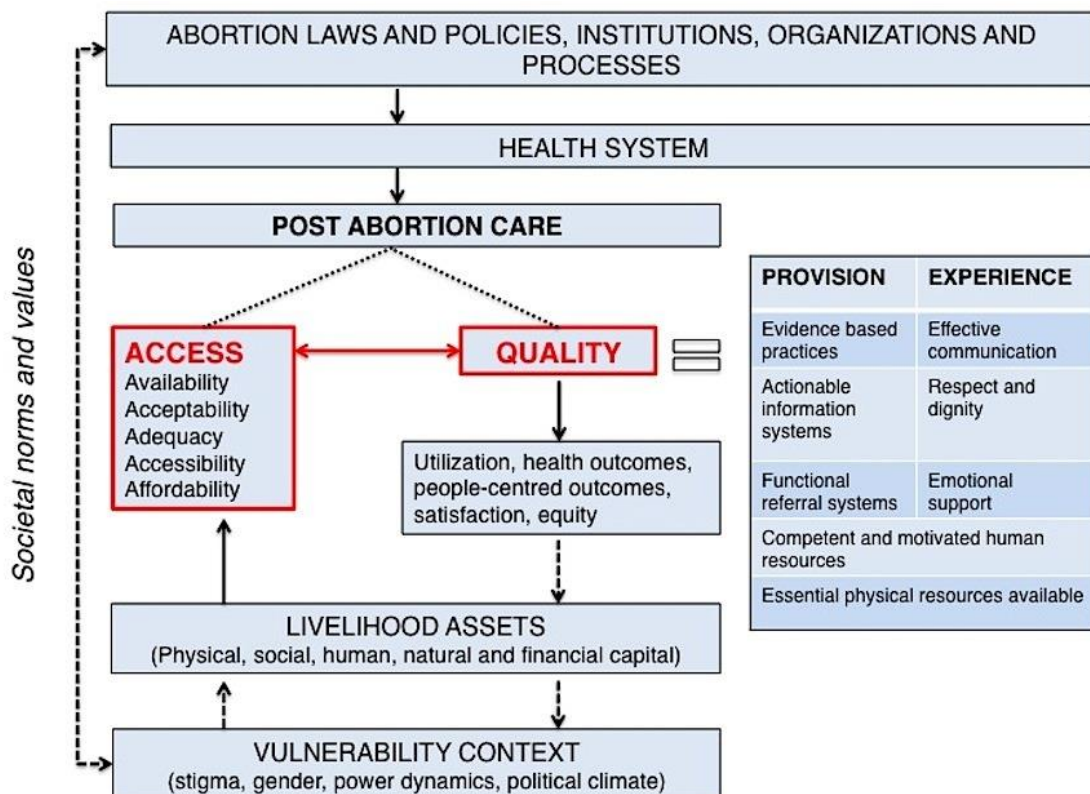
Furthermore, the last two decades have seen multiple laws and policies been put in place, that promote gender equality and women’s empowerment. However, a disconnect exists between these gender-positive-laws and policies and their effective implementation or enforcement.

Although gender is mainstreamed into national development plans, it is not integral to financing or monitoring. Consequently, much of Uganda’s achievements in gender equality are formal – in the shape of laws and policies – but they do not translate to substantive equality (128).

### 3 THESIS FRAMEWORK

This thesis focuses on women's access to and quality of care. I developed the thesis framework (Figure 1) in order to clarify and situate these two concepts within the context of PAC, around which this thesis centres. I also developed the framework to illustrate the focus of the individual studies that make up this thesis. I first modified and simplified the 'Health Access Livelihood Framework' that Obrist et al. developed (129) as well as the WHO framework of quality of care for pregnant women and new-borns that Tunçalp et al. created (130). I then combined these two frameworks of access and quality of care and applied the result to PAC. The WHO framework is focused on childbirth and does not specifically mention the quality of abortion-related care. In Obrist et al.'s framework, the authors mainly discuss quality in terms of technical quality, which they consider to be an intermediary link to health outcomes and patient satisfaction. Thus, I saw a need for a thesis framework that 1) recognises the importance of both access and quality of care, 2) has a comprehensive take on quality and 3) displays how these concepts are interlinked and interdependent within the context of PAC.

Figure 1. Thesis framework adapted from Obrist et al. and Tunçalp et al. and applied to PAC.



The WHO defines quality of care as ‘the extent to which health care services provided to individuals and patient populations improve desired health outcomes. In order to achieve this, healthcare needs to be safe, timely, efficient, equitable and people-centred’. A description of the characteristics of quality of care are presented in Table 2 (130). The process of care occurs along two important and interconnected dimensions of 1) provision of care and 2) experience of care, as visualised in the framework (Figure 1). Good-quality care requires that practices are evidence-based, that HCPs are motivated and that essential resources are available. The experience of care includes effective communication that enables women to make informed choices and care that is provided with respect and dignity (130).

Table 2. Characteristics of quality of care

<b>Safe</b>	Healthcare is delivered in a way that minimises risk and harm to the patient
<b>Timely</b>	Care is provided timely, reducing any delays in access and provision of care
<b>Effective</b>	Care is evidence-based
<b>Efficient</b>	Maximises resources, reduces any wastage
<b>Equitable</b>	Care does not vary in quality depending on personal characteristics of the patient
<b>People-centred</b>	Takes into account the preferences, culture and aspiration of the care seeker

Regarding access, the concept is complex, and a variety of interpretations exist in the literature. Access can be defined as the ability to identify a health need and to reach and obtain adequate care when in need (131). The framework by Obrist et al. was developed specifically for resource-poor settings. According to this framework the concept of access contains five dimensions (Table 3) (129). The degree to which people can access healthcare services depends on the interaction between the supply of healthcare services and the policies, institutions, organisations and processes surrounding them (129). When applied to PAC, these include abortion laws and related policies and the institutions and processes that govern reproductive healthcare provision within a specific context. The legal environment and institutions that govern healthcare, shape health systems (129), which in turn create the structures which enable access to good-quality care (130).

Table 3. Dimensions of access to healthcare

<b>Availability</b>	Healthcare services and goods are able to meet patients' needs
<b>Accessibility</b>	Geographical access i.e. the location of care is in line with the location of patients
<b>Affordability</b>	The cost of care matches patients' ability to pay
<b>Adequacy</b>	The organization of healthcare meets patients' expectations
<b>Acceptability</b>	Provider characteristics match with those of patients. The care is culturally and socially acceptable and patients trust in the competence of providers

According to Obrist et al. access also depends on the degree people can mobilize livelihood assets within a specific vulnerability context. Livelihood assets determine whether people identify a healthcare need and are able to seek and obtain healthcare. Assets comprise physical, social, human, natural and financial capital. Social and human capital include social networks, education, skills and knowledge. Physical capital equates to infrastructure, equipment and transportation. Financial capital refers to available cash and credit. Finally, natural capital comprises land, water and livestock. The extent of a person's livelihood assets is in turn influenced by the vulnerability context, which includes factors such as climate, economy and politics (129). In order to fit the thesis framework within the context of PAC, I have added structural factors to the vulnerability context that are important for women's access to SRH care and these are stigma, gender, and power dynamics. The double-tailed arrow between 'quality of care' and 'access to care' signify the interdependence between these two concepts; while quality of care influences access to PAC, quality of care is dependent on dimensions within the concept of access, such as acceptability, adequacy and availability. Access to quality PAC influences health outcomes, utilisation of care and satisfaction, which in turn impact a woman's livelihood assets. I argue that livelihood assets may also influence the vulnerability context in relation to abortion by reinforcing and maintaining stigma, patriarchal gender norms and power imbalances. I illustrate this with arrows between livelihood assets and the vulnerability context. Finally, all the components in the framework are influenced by societal norms and values (as shown in Figure 1).

Study I (Papers I and II) primarily focus on access-domains *availability* and *acceptability*. Study II (Paper III) concentrates on the vulnerability context, livelihood assets, and the social norms a values that embrace the framework. Study III (Paper IV) mainly centres around the *provision-* and *experience-*dimensions of quality of care

## 4 RATIONALE

Strengthening the health workforce and increasing access to safe abortion and good-quality PAC have been put forward as priority interventions for women's health (49). Expanding midwives' role in PAC using misoprostol has great potential to increase access to evidence based and cost-effective care, and thus reduce maternal mortality and morbidity. At the conception of this thesis work, evidence existed confirming that nurses and midwives can perform 1<sup>st</sup> trimester induced abortions with both surgical and medical methods (72, 132). Furthermore, it had been established that misoprostol for the treatment of 1<sup>st</sup> trimester incomplete abortion was safe, effective, and acceptable, and highly suitable for use in low-resource settings (53, 57, 133). International experience, programmatic evidence and research suggested that midwives could also provide PAC as safely and effectively as physicians and that care remained acceptable (48, 50, 58, 69). However, strong research evidence based on randomised controlled trials (RCTs) and international guidelines, supporting this idea, were lacking.

Young women in Uganda are especially vulnerable to unintended pregnancy and unsafe abortion (122), yet we know little about agency in relation to these events. Greater understanding of reproductive decision-making and the circumstances under which abortion is conducted and care is sought are critical in order to improve and protect young women's SRHR. This information can also provide insights relevant for access and quality of care. Research and government reports indicate that access to good-quality PAC is limited in Uganda – that women seeking PAC are not always managed properly or treated with respect (91, 111–114, 116). Midwives are the backbone of Uganda's health system and their role in PAC is expanding. Still, midwives' perspectives on PAC and related quality have not been thoroughly elucidated. Their viewpoints could improve our understanding of the quality of care, including midwives' working conditions and the role that stigma plays in PAC.

By addressing the above-mentioned knowledge gaps through a task sharing intervention and by seeking the perspectives of young women and HCPs, this thesis attempts to improve access to and quality of PAC in Uganda and elsewhere.



## **5 AIMS AND OBJECTIVES**

### **5.1 OVERARCHING AIM**

The aim of the thesis is to identify means to improve access and quality of post abortion care in low-resource settings, through task sharing and by exploring the perspectives of young women and healthcare providers in Uganda.

### **5.2 OBJECTIVES**

- To investigate the safety and effectiveness of diagnosis and treatment of 1<sup>st</sup> trimester incomplete abortion with misoprostol by midwives compared with physicians (Paper I)
- To investigate women's acceptability of diagnosis and treatment of 1<sup>st</sup> trimester incomplete abortion with misoprostol by midwives compared with physicians (Paper II ).
- To explore reproductive agency in relation to unsafe abortion among young women seeking post abortion care (Paper III).
- To explore midwives' perspectives on post abortion care, including the quality of care (Paper IV)

## 6 METHODS

### 6.1 OVERVIEW OF STUDIES AND METHODS

The studies, research questions and methods used in this thesis are presented in Table 4.

Table 4. Overview of studies and methods

Study	Research questions	Design and participants	Data collection and outcomes	Data analysis
Study I, Paper I	Is diagnosis and treatment of 1 <sup>st</sup> trimester incomplete abortion with misoprostol safe and effective when care is provided by midwives compared with physicians?	Multi-centre randomised controlled equivalence trial. Women with 1 <sup>st</sup> trimester incomplete abortion (n=999).	Primary outcome <i>complete abortion</i> measured 14–28 days following the initial visit.	Descriptive statistics, generalized linear mixed effects model (analysis done per protocol).
Study I, Paper II	Is diagnosis and treatment of 1 <sup>st</sup> trimester incomplete abortion with misoprostol acceptable to women when care is provided by midwives compared with physicians?	Multi-centre randomised controlled equivalence trial. Women with 1 <sup>st</sup> trimester incomplete abortion (n=999).	Secondary outcome <i>acceptability</i> measured in expectations and satisfaction, 14–28 days following the initial visit.	Descriptive statistics, univariate and multivariate logistic regression, generalized linear mixed effects model (analysis done per protocol).
Study II, Paper III	How does the social environment shape young women's reproductive agency and actions?  Under what circumstances is abortion conducted and PAC sought?	Individual in-depth interviews with young women (15–24 years) seeking PAC (n=17, 18 interviews). Respondents had induced the most recent abortion.	Interview guide exploring experiences of unintended pregnancy and abortion, decision-making and the role of friends, partners and family members.	Thematic analysis, inductive approach.
Study III, Paper IV	What are midwives' perspectives on PAC?  How do midwives perceive the quality of care?	Individual in-depth interviews with midwives providing PAC (n=22). Respondents reflected on experiences from present and previous employments.	Interview guide exploring midwives' experiences and perceptions of PAC, abortion legality and quality of care, including stigma and working condition.	Thematic analysis, inductive approach.

## 6.2 THESIS SETTING

Uganda is divided into administrative units known as districts, which are further divided into counties, sub-counties, parishes and villages. The districts are spread across four administrative regions of Northern, Eastern, Central and Western Uganda. The number of districts has steadily increased over the years as part of a decentralisation strategy (88). As of March 2018, there were 122 districts in Uganda (134). The setting for this thesis is the central region of Uganda. The central region comprises 25 districts (including the capital of Kampala, a city of around 1,2 million inhabitants) located in urban, semi-urban and rural settings (134). The districts of the central region are in the colour green in the map below (Figure 2). In this part of the country, Luganda is the main local language, while English is the official language. The main ethnic group is the Baganda (88).

The healthcare sector in Uganda is divided into a public and a private sector, with public healthcare facilities constituting 55% of the total number of facilities. Public health services in Uganda are delivered through national referral hospitals, regional referral hospitals and general hospitals. Healthcare services at the district level are made up of three types of primary care facilities. These are known as healthcare centres (HC) levels II–IV with level II being the lowest level of formal health care delivery and level IV being the most advanced; this last level is immediately below the general hospital. There is also HC I which consist of village health teams. HC IV is staffed by nurse aides, registered nurses, midwives, clinical officers and physicians, although not all HC IV have physicians. General hospitals and HC IV are equipped to provide emergency obstetric and gynaecological services and have referral functions to regional and national referral hospitals (114).

The studies that comprise this thesis were conducted in seven public healthcare facilities within seven districts in the central region: Butambala, Kampala, Luweero, Mpigi, Masaka, Nakaseke and Wakiso district (see map Figure 2). The study sites consisted of two HC IV (Mpigi and Luweero HC IV), three general hospitals (Entebbe (in Wakiso district), Gombe (in Butambala district) and Nakaseke Hospital), one regional referral hospital (Masaka Hospital) and one national referral hospital (Kampala Hospital).

Figure 2. Map of Uganda (districts as of June 2016)



Source: UBOS, 2016

Study I (Papers I and II) was conducted in six healthcare facilities in six different districts. We chose the study sites based on sufficient caseloads per week and staffing levels of physicians and midwives (Table 5). We also took the distance between study sites and the coordinating centre in Kampala into consideration. We informed the heads of each hospital and HC about the study and received their consent to carry out the trial in their respective healthcare facility.

Table 5. Staffing and estimated caseload per week at study sites involved in study I

Facility	Level	Physicians	Midwives	Caseload/week
Mpigi	Health centre IV	2	3	8
Luweero	Health centre IV	2	3	5
Entebbe	General hospital	4	5	6
Nakaseke	General hospital	4	5	12
Gombe	General hospital	3	5	10
Masaka	Regional referral hospital	4	8	15
<b>Total</b>		<b>19</b>	<b>29</b>	<b>56</b>

Study II and III (Papers III and IV) were conducted in Mulago National Referral Hospital in Kampala; it has a target population of 10 million (113). The hospital has a high caseload of PAC patients that the emergency gynaecological ward manages. In 2013, the highest rates of induced abortion (77 per 1,000 women aged 15–44 years) were found in Kampala, almost twice the national average (39 per 1,000 women aged 15–44 years) (87). We deemed the emergency gynaecological ward to be suitable for participant recruitment for because of its caseload and large target population involving urban, semi-urban and rural populations.

### **6.3 RANDOMISED CONTROLLED EQUIVALENCE TRIAL, STUDY I (PAPERS I AND II)**

#### **6.3.1 Study design and hypotheses**

Study I was a randomised controlled equivalence trial. We hypothesised that midwives can diagnose and treat 1<sup>st</sup> trimester incomplete abortion with misoprostol as safely and effectively as physicians (Paper I). Furthermore, we hypothesised that there would be no difference in women's acceptability between the two study groups (midwife vs. physician) (Paper II).

### 6.3.2 Population, intervention, control and outcomes

Details on the study population, intervention, control and outcomes (PICO) are summarised in Table 6.

Table 6. PICO

<b>Population</b>	Women with 1 <sup>st</sup> trimester incomplete abortion
<b>Intervention</b>	Diagnosis and treatment with misoprostol by a midwife
<b>Control</b>	Diagnosis and treatment with misoprostol by a physician
<b>Outcome (primary)</b>	Complete abortion requiring no further medical or surgical intervention within 14-28 days of treatment
<b>Outcome (secondary)</b>	Serious adverse events (SAEs), acceptability, bleeding, pain and unscheduled visits.

### 6.3.3 Details on secondary outcomes

We measured *bleeding* in relation to normal menstruation: same as-, more than- or less than a normal menstrual bleeding. We measured *pain* following treatment using a 0–10 point visual analogue scale (VAS). All participants were encouraged to document their symptoms in a symptom diary card to be reviewed at the follow-up visit. An *unscheduled visit* was any visit that occurred within one month of the initial visit and related to the incomplete abortion.

A SAE was defined as an untoward medical occurrence that result in death, is life threatening, requires or prolongs hospitalisation, causes persistent or significant disability, incapacity, or in the opinion of the investigator, represents other significant hazards or potentially serious harm to research subjects or others. In the event of a SAE, research assistants were to contact the study coordinator and send a SAE report form to the ethical review board as per instructions. The report form was situated at the very end of each study protocol (Appendix I).

*Overall acceptability* was calculated by merging two questions measuring acceptability. One question measured expectations (How did you perceive the treatment experience?) and one measured satisfaction (Would you recommend the treatment to a friend?). *Satisfactory* meant that the woman found the treatment to be as expected or easier than expected and that she would recommend the treatment to a friend. *Non-satisfactory* meant that the woman experienced the treatment as worse than expected or that she would not recommend the treatment to a friend.

### **6.3.4 Training of healthcare providers**

Midwives and physicians providing PAC at the selected study sites when study I was initiated, were invited to participate in the study. Study sites made the final decision regarding who and how many HCPs should take part in the study, on the condition that at least two physicians and two midwives were involved at each site. No restrictions were made on HCPs length of professional experience or level of midwifery education (certificate, diploma, degree). All participating HCPs attended a 5-day training course before study start. The training focused on diagnosis and treatment of 1<sup>st</sup> trimester incomplete abortion with misoprostol and MVA as well as study procedures. The training was structured according to Ipas standardised training modules for abortion care. Furthermore, we trained midwives at each study site to be research assistants in the study. Their tasks included screening and enrolment, follow-up assessments, contraceptive counselling and performing MVA in cases of failed treatment.

Close to commencement of data collection, the study coordinator and myself went through the study tools and study procedures once again with all midwives and physicians at each study site.

### **6.3.5 Eligibility criteria**

Women who presented at any of the six study sites with bleeding and contractions in early pregnancy were assessed for eligibility. We included women with 1<sup>st</sup> trimester incomplete abortion, defined as products of conception remaining in the uterus with continuing bleeding, bulky uterus and open cervical os at examination. We excluded women with known allergy to misoprostol, a uterine size more than 12 weeks of gestation, suspected ectopic pregnancy, signs of pelvic infection and or sepsis, and unstable hemodynamic status and shock.

### **6.3.6 Randomisation and masking**

Opaque and sealed envelopes were sequentially numbered and each contained a random allocation. After obtaining written consent, the envelopes were opened in consecutive order by the research assistants. The randomisation was 1:1 and was stratified for study site. A computer generated randomisation list was created in blocks of 12 with a list of codes from 1 to 994, with each code linked to a study group (midwife or physician group).

The intervention or control was not masked to study participants or participating HCPs.

### **6.3.7 Enrolment and informed consent**

Screening for eligibility was done by filling a screening sheet (Appendix I) and by a pelvic exam. Gestational age was based on the last menstrual period and a bimanual palpation. Ultrasound was not routinely used. Initials of all women screened for eligibility were documented in a log book together with information on whether or not she was eligible, reason for non-eligibility, randomisation number, date for follow-up and the woman's phone number. Eligible women were invited to participate and informed about the study purpose, procedures, risks, benefits, and alternatives to participation. The consent form was available in both Luganda and English and both oral and written consent was obtained from all participants.

All Participants were given a single dose of 600µg oral misoprostol and offered pain medication, either paracetamol or ibuprofen. The women were then advised to remain at the clinic for four hours for observational purposes. Before discharge all were given information about expected side effects such as bleeding and pain, and abnormal symptoms such as fever, and foul smelling vaginal discharge, severe pain and heavy bleeding. Women were also told about the importance of seeking care if experiencing abnormal symptoms. Furthermore, all participants were offered contraceptive counselling before leaving the facility and then again at the follow-up visit, as outlined in the study protocol appended to this thesis. Prophylactic antibiotics were given to all participants in line with national guidelines.

### **6.3.8 Clinical assessments at initial visit and follow-up**

- Obstetric and gynaecological history including last menstrual period and contraceptive use (only at initial visit)
- Pelvic exam including estimation of the size of the uterus, signs of infection or trauma, cervical status and bleeding
- Blood pressure
- Temperature

### **6.3.9 Follow-up and measurement of outcomes**

We measured the primary and secondary outcomes at a follow-up visit 14–28 days after the initial visit. Study providers were advised that the person conducting the follow-up assessment should preferably not be the same as the one who performed the diagnosis and provided the treatment.



### 6.3.10 Data management

A coordinating centre was set up at Mulago National Referral Hospital in Kampala, where randomisation envelopes were prepared and data management was organised. Study protocols were collected and double data entry was conducted in EpiData 3.1. The study coordinator and myself monitored enrolment, recruitment and follow-up. We monitored data quality using a quality-control checklist at each visit. We checked protocols for accuracy and made corrections in protocols when appropriate and only after discussion with the research assistants. The study coordinator acted as a support person to HCPs during data collection.

### 6.3.11 Sample size

The sample size was calculated based on the treatment outcome *complete abortion*. The calculations were based on the objective of showing two-sided equivalence assuming that the rate of incomplete abortions could be 4% for each study group (midwife/physician). We pre-defined an acceptable completion rate between the two providers which ranged between -4% to 4%. This equivalence range was based on clinical significance related to the treatment outcome. With a power of 80% and two-sided 95% confidence interval (CI), the sample size became 452 per study arm. Accounting for a 10% loss to follow-up the total sample size was 994.

### 6.3.12 Analysis

We defined the intention-to-treat (ITT) population as all randomised participants with endpoint data, excluding those who had withdrawn consent. We defined the per-protocol (PP) population as the ITT population minus participants with protocol violations. We considered p-values equal to or lower than 0.05 statistically significant. Safety data were viewed descriptively without any formal statistical testing. We considered the first month as a run-in period. There were no changes to the study design following the first month, and therefore this data were included in the analysis.

We used descriptive statistics to analyse background characteristics for each study group and categorical outcomes. Analysis of the primary outcome, *complete abortion* and the secondary outcome, *acceptability*, was done by PP analysis. A generalized linear mixed-effects model was used to estimate group differences, with study group as a fixed effect and study site as a random effect. We used 1000 bootstrap simulations to estimate the CI for the risk difference. Additionally, we estimated an adjusted risk difference by extending the model with fixed effects. These fixed effects were assumed to potentially impact the risk difference and

included: education (none/primary versus secondary/tertiary), age (<25 versus 25+), marital status (single versus married/cohabiting), parity (0-para versus multipara) and number of pregnancies (1 versus >1). The adjusted risk difference for the outcome *acceptability* was further extended with the fixed effect: reported induced current abortion (yes/no). The adjusted risk difference was estimated as the predicted risk difference at the average of all included covariates. A 95% CI of the risk difference, falling entirely within the pre-defined margin (-4% to 4%), means that equivalence between the two study groups is established. We analysed data using Stata version 13. Statistical analysis of the primary outcome and secondary outcome were analysed using the lme4 package in R version 3.1.1.

#### *Analyses specific to Paper II*

We used univariate logistic regression to assess the relationship between the dependent variable, *overall acceptability*, and independent variables: socio-demographic background, reproductive history and treatment experience. Treatment experience was reflected in the measures pain, bleeding, feeling calm and safe following treatment, unscheduled visits and treatment outcome. We then conducted a multivariate logistic regression analysis in which the independent variables that were found to be statistically significant in the univariate analysis, were added. Results were presented in odds ratio (OR) and adjusted OR.

## **6.4 INDIVIDUAL IN-DEPTH INTERVIEWS, STUDIES II AND III (PAPERS III AND IV)**

### **6.4.1 Participants and data collection - Reproductive agency, Study II (Paper III)**

Between April and August 2013, 18 individual in-depth interviews (IDIs) were carried out with 17 women seeking PAC. Women who had induced their most recent abortion and who were between 15–24 years old were included. Midwives on the emergency gynaecological ward helped identify potential participants by asking them about their experiences and giving them brief information about the study. These conversations always took place in a private space in order to protect the women. If a midwife knew or suspected that the woman had induced the current abortion, I was contacted. I then approached the woman and informed about the study and asked her to participate if inclusion criteria were met. In cases where the woman did not speak English, a Ugandan research assistant informed her about the study over phone in Luganda. I exchanged contact information with those who seemed interested in participating. Two interviews were conducted on the same day as they were asked to participate, all others were conducted on a separate occasion. Time past between first

encounter and the actual interview (among women interviewed at a separate occasion) spanned from a few days up to 4 months. Most interviews were, however, conducted within a few weeks of making initial contact. We conducted the interviews in a private room at the hospital, except one, which was conducted at the woman's home. One woman was interviewed twice as several questions remained unclear or unanswered following the first interview.

The interview guide comprised open-ended questions that explored women's experiences of unintended pregnancy and abortion, sexual and reproductive decision-making and the roles of sexual partners, husbands, friends and family. After two pilot interviews the interview guide was slightly altered in order to better reflect the study population and aim. These interviews were not included in the analysis. Non-English-speaking women were interviewed in Luganda with the help of a Ugandan female research assistant who then translated to English. I conducted three interviews in English without the presence of the research assistant, as I judged the respondents' English language skills to be sufficient. Each interview lasted from 40 to 90 min and we only stopped gathering data when no new information was generated.

#### **6.4.2 Participants and data collection - Midwives perspectives, Study III (Paper IV)**

Twenty-two IDIs with midwives working the day shift at the emergency gynaecological ward were conducted between December 2016 and March 2017. The midwife in-charge helped identify potential participants who were then approached, informed about the study, and asked to participate. Co-authors TZ and TS (student midwives at the time) carried out the first twelve interviews. After I had reviewed the transcripts of these interviews, I carried out ten more interviews, using the same interview guide. This was done in order to probe further into questions that I considered had not been fully answered.

The interview guide consisted of open-ended questions that explored midwives' perspectives on PAC. The guide included questions relating to their experiences of PAC provision and their perceptions of unsafe abortion, legality of abortion, and quality of care. We asked the midwives to reflect on their experiences from both urban and rural settings and not just their current work place. All interviews were conducted in English. Each interview lasted from 40 to 90 minutes. We ceased gathering data when no new information was generated.

### 6.4.3 Theoretical considerations

To conceptualise and understand young women's reproductive choices, tactics and actions, we drew on Ortner's (135) theory on agency in Study II (Paper III) (136). Agency, as Ortner defines it, signifies a person's capacity to act and influence events in order to sustain some control over his or her life. Ortner emphasises the relationship between agency and power; agency is shaped within different power regimes – therefore, in order to understand agency, we must understand the power relations within which agency is enacted. Agents are enmeshed in social relations, which they can never act outside of. Although this means that we are never free to act outside of our social systems, Ortner emphasises that we are not fully determined beings. She divides agency into two types that are inter-related: *agency for projects*, which is about intentionality and the pursuit of projects, and *agency for power*, which is about action within power asymmetry and force. Because all power relations as unstable agents can create opportunities for action and assert some control over their lives (135).

### 6.4.4 Thematic analysis

We analysed our findings in Papers III and IV utilizing thematic analysis as described by Braun and Clark (137). We chose this method of analysis because of its flexibility and because of its consideration of how the context affects experiences and the meaning that people make of their experiences (137). The thematic analysis that Braun and Clark offers is a systematic method of identifying, analysing and describing patterns within qualitative data (138). We worked inductively, which means that we coded our data without attempting to fit codes into a pre-conceptualised frame or idea (137). All the interviews were recorded and transcribed verbatim. The interviews conducted in Luganda, with the help of a research assistant, were translated from Luganda into English during transcription. The same research assistant later reviewed the transcription and translation quality. To begin analysis for Papers III and IV we read through the transcripts several times. However, the analysis process was slightly different between the two studies since we conducted manual analysis for Paper III and we used NVivo 11.0 for Paper IV. In Paper III, we organised the data into topics before manually coding them. In Paper IV, we coded the manuscripts directly with the help of NVivo. In both papers, codes were organised into categories/nodes and finally into themes that represented the patterns we had identified in the data. We extracted data representing both semantic and latent content when we organised the data into themes. However, we mainly analysed the data at the latent level, which means the interpretation of the data sought to understand or reveal underlying ideas and assumptions. We then refined

the drafted themes by re-reviewing the transcripts, codes and data extracts that made up each theme. We did the analysis in parallel with data collection and in collaboration with our research teams, discussing the themes and their interpretations as the research process progressed. We then situated the interpretations of the themes and the broader implications of the findings in relation to existing evidence.

## **6.5 ETHICAL CONSIDERATIONS**

Because the study topic may be viewed as sensitive and controversial, we took several measures to ensure that participants felt comfortable sharing information, and to respect their privacy and confidentiality. First of all, training of research assistants included instructing them in respectful communication. Secondly, we sought and obtained verbal and written consent from all participants in this thesis. All women were informed that participation was voluntary and that their responses were confidential. Furthermore it was explained to them that they could end their participation at any time without providing a reason and without any consequences. All women and HCPs included in this thesis were interviewed in a private space. In Study I, informed consent forms were available in both English and Luganda. In the case of illiteracy, the consent form was read to the woman in her preferred language, after which she signed the consent form to the best of her ability. A room was set up at each study site, where screening, including clinical assessment, enrolment and follow-up was conducted. Each study site was provided a lamp, thermometer, and sphygmomanometer for use in the clinical assessments. All procedures performed were evidence based and safe. Women who declined participation were given the standard treatment according to local routine in the particular healthcare facility.

In order to minimise any risk to the women in Study II, I emphasised the importance of respect for privacy and confidentiality to the midwives who helped identify potential participants. I conducted the first two interviews on the same day as the initial contact. However, I noticed that these two women did not seem comfortable sharing their stories with me despite agreeing to participate. I therefore changed our strategy and conducted the remaining interviews on a separate occasion to the first encounter. I did this so that the respondents would not feel pressured to participate and to ensure that participation was truly voluntary; it also enabled me to build some rapport with the women. I was aware that some of the women may have gone through traumatising events and might carry internalised stigma. I did not want to create a situation where the women felt re-stigmatised or traumatised. Therefore, when I first approached the women and prior to each interview, I stressed that I was there to listen to their stories and not to judge them, that I empathised with them and that

I was interested in what they had to say. For some women, this interview was perhaps the only time they were able to relay their abortion stories to another person without risking legal repercussions or stigma. At the end of each interview, I informed the women about where they could access free contraceptive counselling and provision. In a few cases, the pregnancy was due to rape. I provided these women with contact details for a counselling service for rape victims.

With regards to Study III, all respondents were interviewed in a room adjacent to the ward where they worked at a time of their convenience. The midwives were informed that they were asked to participate because of our interest in their perspectives on PAC in Uganda.

All data were handled according to national law and guidelines. Furthermore, we anonymised and safely stored the data in a password-protected computer. All participants in this thesis were given a small monetary incentive to compensate them for their time spent in the study. HCPs in Study I were also compensated for each woman they enrolled in the study and each woman who returned for a follow-up visit.

## **Study I**

The study protocol was approved by the scientific and ethical review group at the Department of Reproductive Health and Research at the WHO headquarters in Geneva. Makerere University, School of Medicine Research and Ethics Committee (2012-129) and the Regional Ethical Review Board in Stockholm, Sweden (Dnr 2013/2; 9) gave their ethical clearance. We also obtained approval from the Uganda National Council for Science and Technology (HS1314).

## **Study II**

The Department of Obstetrics and Gynaecology, Faculty of Medicine and Research committee, Mulago Hospital (2011-169) and the Regional Ethical Review Board in Stockholm, Sweden (Dnr 2011/1490-31/4) gave their ethical clearance. We obtained administrative clearance from Mulago Hospital.

## **Study III**

Makerere University, College of Health Sciences, Higher Degrees, Research and Ethics Committee (HDREC 465) and the Uganda National Council of Science and Technology (SS 4491) granted the study ethical clearance. We also obtained administrative clearance from Mulago Hospital.

## 7 FINDINGS

### 7.1 OVERVIEW OF FINDINGS

An overview of the main findings of this thesis are presented in Table 7. Below this overview follows a summary of the thesis findings. For additional details see the reprints of Papers I–IV appended to this thesis.

Table 7. Overview of study objectives and related findings

Study	Objectives	Main findings
Study I, paper I	To investigate the effectiveness and safety of diagnosis and treatment of 1 <sup>st</sup> trimester incomplete abortion with misoprostol by midwives compared with physicians.	Diagnosis and treatment of 1 <sup>st</sup> trimester incomplete abortion with misoprostol was equally safe and effective when care was provided by midwives compared with physicians.
Study I, paper II	To investigate women's acceptability of diagnosis and treatment of 1 <sup>st</sup> trimester incomplete abortion with misoprostol by midwives compared with physicians.	Diagnosis and treatment of 1 <sup>st</sup> trimester incomplete abortion with misoprostol was equally acceptable to women when care was provided by midwives compared with physicians. Acceptability was high and associated with treatment experience and outcome.
Study II, paper III	To explore reproductive agency in relation to unsafe abortion among young women seeking post-abortion care.	Gender power imbalances and stigma constrained women's reproductive agency.  Secrecy and lack of resources resulted in difficulties in accessing care and delayed care seeking.  Abortion was described as the only and least-wanted option and simultaneously depicted as an agentive action that intended to regain control.  Experiences of unsafe abortion shaped discourse and contraceptive intentions.
Study III, paper IV	To explore midwives' perspectives on post abortion care including the quality of care.	Personal morality in relation to abortion conflicted with midwives professional duty and commitment to provide good-quality care.  Poor working conditions further hampered provision of good-quality care and left midwives feeling frustrated.  PAC was viewed as essential midwifery skills and PAC experience was said to increase empathy, dispel myths and decrease stigma.  Stigma affected both HCPs and women seeking PAC

## **7.2 IS DIAGNOSIS AND TREATMENT OF 1<sup>ST</sup> TRIMESTER INCOMPLETE ABORTION WITH MISOPROSTOL SAFE AND EFFECTIVE WHEN CARE IS PROVIDED BY MIDWIVES COMPARED WITH PHYSICIANS? STUDY I, PAPER I**

From April 2013 to July 2014, 1108 women were assessed for eligibility. Out of those, 1010 were randomised; 506 to the midwife group and 504 to the physician group. Eleven participants were excluded. Forty-four women were lost to follow-up and eventually 955 women were included in the analysis of the primary outcome. We had two cross-overs whereby one was lost to follow-up. The analysis of the primary outcome was done by PP analysis as the PP population and ITT population were nearly identical. The flow of participants and reasons for their exclusion are presented in the published reprint appended to the thesis (Paper I).

Socio-demographic information and reproductive history of all participants are presented in Table 8. There were no major differences in background characteristics between study groups, apart from the proportion of women who reported having induced the most recent abortion, which was significantly larger in the midwife group. The analysis of women lost to follow-up compared with those who returned for follow-up showed no major differences between study groups apart from gestational age, which was significantly lower among women who were lost to follow-up (Appendix II). The midwife group consisted of enrolled midwives (3 years training), registered midwives (4,5 years training) and nurse-midwives (4,5 years training), and one registered nurse (3 years training). The physician group consisted of medical doctors and one senior clinical officer. The nurse functioned as a midwife and the senior clinical officer as a physician in their respective healthcare facility (data not shown). Background characteristics of participating HCPs are presented in Table 9.

In the midwife group, there were 452 (95.8%) women with complete abortion and in the physician group there were 467 (96.7%). This leaves the overall proportion of complete abortion to 96.2% (n=919). There were a total of 36 women with incomplete abortion; 20 in the midwife group and 16 in the physician group. These women were managed surgically with MVA. The risk difference between the two study groups, based on the generalized linear mixed effects model, was -0.8% (95% CI -2.9 to 1.4). The adjusted risk difference was -0.6 (-2.3 to 1.2). The risk differences and 95% CIs (unadjusted and adjusted) fall within the pre-defined equivalence margin of -4 to +4%. No serious adverse events were recorded.



Table 8. Background characteristics of participants by study group

Item	Midwife n=502 (%)	Physician n=497 (%)	Total n=999 (%)
<b>Age (n=995)</b>			
Mean (SD)	26.1 (6.5)	26.5 (6.5)	26.3 (6.5)
16-19	84 (16.8)	61 (12.3)	145 (14.6)
20-24	154 (30.9)	170 (34.3)	324 (32.5)
25-34	196 (39.3)	196 (39.5)	392 (39.4)
35-49	65 (13.0)	69 (13.9)	134 (13.5)
<b>Education</b>			
None	33 (6.6)	49 (9.9)	82 (8.2)
Primary school	227 (45.2)	253 (50.9)	480 (48.1)
Secondary school	198 (39.4)	156 (31.4)	354 (35.4)
Tertiary school	44 (8.8)	39 (7.8)	83 (8.3)
<b>Marital status</b>			
Married/Cohabiting	373 (74.3)	386 (77.7)	759 (76.0)
Single	114 (22.7)	101 (20.3)	215 (21.5)
Divorced/ Widow	15 (3.0)	10 (2.0)	25 (2.5)
<b>Occupation (n=996)</b>			
Unemployed	245 (49.0)	253 (51.0)	498 (50.0)
Formal employment	64 (12.8)	52 (10.5)	116 (11.6)
Self employed	175 (35.0)	117 (35.7)	352 (35.2)
Student	16 (3.2)	14 (2.8)	30 (3.0)
<b>Religion (n=998)</b>			
Catholic	232 (46.2)	213 (42.9)	445 (44.6)
Protestant	146 (29.1)	160 (32.3)	306 (30.7)
Muslim	93 (18.5)	107 (21.6)	200 (20.0)
Born again	31 (6.2)	16 (3.2)	47 (4.7)
<b>Gestational age based on clinical exam (n=993)</b>			
Mean (SD)	8.7 (2.3)	8.8 (2.1)	8.8 (2.2)
Range	1-12	4-12	1-12
<b>Number of pregnancies (n=998)</b>			
Mean (SD)	3.4 (2.4)	3.5 (2.2)	3.4 (2.3)
1	121 (24.1)	99 (19.9)	220 (22.1)
2-5	306 (61.1)	308 (62.0)	614 (61.5)
6-10	64 (12.8)	89 (17.9)	153 (15.3)
11-20	10 (2.0)	1 (0.2)	11 (1.1)
<b>Induced abortions (n=998)</b>			
Mean (SD)	0.16 (0.4)	0.10 (0.3)	0.13 (0.4)
0	424 (84.6)	446 (89.7)	870 (87.2)
1-2	77 (15.4)	51 (10.3)	128 (12.8)

Table 9. Background characteristics of participating PAC providers

Item	Midwife n=29 (%)	Physician n=13 (%)	Total n=42 (%)
<b>Age</b>			
Mean (SD)	40.5 (8.2)	42.1(10.9)	41.0 (9.0)
Median	41	44	42
Range	27-57	26-57	26-57
<b>Sex</b>			
Female	29 (100)	1(7.7)	30 (71.4)
Male	0	12 (92.3)	12 (28.6)
<b>Years of professional practice</b>			
Mean (SD)	15.4 (7.8)	14.8 (9.8)	15.2 (8.4)
Range	2-30	2.5-30	2-30
<b>Clinical experience in PAC*</b>			
Mean (SD)	3.7 (3.7)	8.3 (7.3)	6.2 (5.5)
Range	0-13.5	0.5-28.5	0-28.5

\*Before study start

### 7.3 IS DIAGNOSIS AND TREATMENT OF 1<sup>ST</sup> TRIMESTER INCOMPLETE ABORTION WITH MISOPROSTOL ACCEPTABLE TO WOMEN WHEN CARE IS PROVIDED BY MIDWIVES COMPARED WITH PHYSICIANS? STUDY I, PAPER II

A total of 953 women, 471 in the midwife group and 481 in the physician group, were included in the analysis of the secondary outcome, *acceptability*, also done by PP-analysis. Almost all women (95%) found the treatment satisfactory. Women's acceptability by study group are shown in Table 10.

Table 10. Women's acceptability by study group

Item	Midwife n=471 (%)	Physician n=481 (%)	Total n=953 (%)
<b>How did you perceive the treatment procedure? (n=954)</b>			
As expected	104 (22.0)	104 (21.6)	208 (21.8)
Easier than expected	349 (74.9)	357 (74.0)	706 (74.0)
Worse than expected	19 (4.0)	21 (4.4)	40 (4.2)
<b>Would you recommend the treatment to a friend? (n=954)</b>			
Yes	465 (98.5)	477 (99.0)	942 (98.7)
No	7 (1.5)	5 (1.0)	12 (1.3)
<b>Overall acceptability (n=953)</b>			
Satisfactory	449 (95.1)	455 (94.6)	904 (94.9)
Not satisfactory	23 (4.9)	26 (5.4)	49 (5.1)

Data are n (%) unless otherwise stated

The risk difference between the two study groups in *overall acceptability*, based on the generalized mixed effects model, was 0.5% (-1.93 to 3.10). The adjusted risk difference was 0.70% (-1.44 to 3.01). These risk differences and 95% CIs (unadjusted and adjusted) fall

within the pre-defined equivalence margin of -4 to +4%. Experiencing heavy bleeding (adjusted OR) 0.40; 95% CI 0.17–0.94) and severe abdominal pain following treatment lasting more than 24 hours (adjusted OR 13.62; 95% CI 5.67–32.69), failed treatment (adjusted OR 0.11; 95% CI 0.02–0.51), and not feeling calm and safe (adjusted OR 0.07; 95% CI 0.02–0.24), were significantly associated with finding the treatment experience non-satisfactory. None of the other measures related to the treatment experience or participants background characteristics were associated with *overall acceptability*.

#### **7.4 HOW DOES THE SOCIAL ENVIRONMENT SHAPE YOUNG WOMEN'S REPRODUCTIVE AGENCY AND ACTIONS? UNDER WHAT CIRCUMSTANCES ARE ABORTIONS CONDUCTED AND CARE SOUGHT? STUDY II, PAPER III**

The data analysis generated four themes which are presented in Table 11. The order of the themes reflects the women's abortion trajectories starting with pregnancy, the abortion decision and abortion care-seeking, and consequences of the experience.

Table 11. Overview of themes

<b>Timeline</b>	<b>Themes</b>
Unsafe sex and pregnancy circumstances	Unintended pregnancy – power dynamics and contraception contraceptives
Abortion decision-making	Avoiding stigma and regaining control – implications for agency
Seeking and obtaining abortion and PAC	Risk awareness and risk taking while maintaining secrecy
Post abortion contraception decision-making	The abortion experience shaping discourse and contraceptive intentions

##### **7.4.1 Unintended pregnancy – power dynamics and contraception misconceptions**

We found gender power imbalances to be evident within young women's intimate partner relationships. This meant that the respondents had limited capacity to negotiate the timing of sexual encounters and the use of contraception. Some women were pressured into unsafe sex through emotional pressure; a couple said that they had been raped. However, some respondents also explained that unsafe sex occurred because of love and trusting that a pregnancy would end in marriage. Furthermore, young women's economic dependency on male partners was explained as limiting negotiation capacity:

*‘Economic dependency...to me actually economic dependency is the biggest challenge. Most of the young women I have interacted with, my peers, at times they tell you, I didn’t really want but I had no option and he refused to wear a condom’. (Esther, 25 years old)*

When discussing contraception decision-making, respondents held different opinions about who should have the final say on contraceptive use. However, there was a consensus that men, in general, do not like contraception and in cases of discordant opinions women seemed to comply with their partners’ wishes. Misconceptions regarding contraception and limited awareness related to the reproductive cycle and which days are considered safe, were apparent in the interviews.

#### **7.4.2 Avoiding stigma and regaining control – implications for agency**

Responses surrounding decision-making revealed conflicted feelings and contradicting reasoning. Respondents did not claim ownership of decision-making in relation to the abortion. Instead, abortion was described as something that was forced upon them by challenging social circumstances; abortion was unacceptable and yet their only available option. Some portrayed the decision to abort as a moral responsibility given their personal circumstances. At the same time, abortions enabled avoidance of stigma, continued education and prospects of economic independence, rendering abortion an agentive action. Avoidance of stigma was crucial as stigma would affect not only oneself but also one’s family.

Furthermore, paternal denial and disinterest would render a pregnancy socially unacceptable and was described by some as the main determinant in the abortion decision. In contrast, a couple of women explained how they had aborted against their partners’ wishes. Their decisions were driven by a fear of stigma and a wish to complete their education. An unintended pregnancy would in many cases lead to discontinued education, which was another source of stigma:

*‘Yeah, they can say that, they (the parents) were providing her school fees but now you see she never completed. “Why didn’t they eat their money and get satisfied? Why didn’t they even buy clothes to wear? They were providing money for her school fees but see now she is pregnant”. They can over-talk actually...Mostly it shames the family. When I get pregnant, I shame my parents and my family plus my young sister, I give them a bad image’ (Justine, 19 years old)*

### **7.4.3 Risk awareness and risk taking while maintaining secrecy**

While secrecy enabled action and avoidance of stigma, secrecy indirectly increased health risks. Several tactics were employed to avoid exposure including primarily seeking care at small private clinics after sundown, confiding in only a few individuals or no one, and self-inducing abortions using traditional medicine. Costs related to the abortion and PAC contributed to delayed care-seeking. Some respondents had used herbs to treat abortion complications in order to avoid care-seeking and the inherent risks of exposure. One respondent explained why she had used local herbs:

*‘If I had money, I would have gotten treatment early enough not to let these things rot inside me. But all this happened because I didn’t have money...I delayed because I did not have money to bring me here to the hospital. Also, I thought this local herb called ‘kamunye’ would work for me but whenever I would take it, a lot of blood would come out smelling badly, which made me come here in the hospital for a check-up. I did not know that something remained inside’. (Florence, 19 years)*

### **7.4.4 The abortion experience shaping discourse and contraceptive intentions**

The abortion experience seemed to shape intentions related to post-abortion contraception and related discourse. Women claimed ownership of contraception decision-making as they concluded that women alone bore the consequences of unintended pregnancy and abortion, therefore, the choice was rightfully theirs to make:

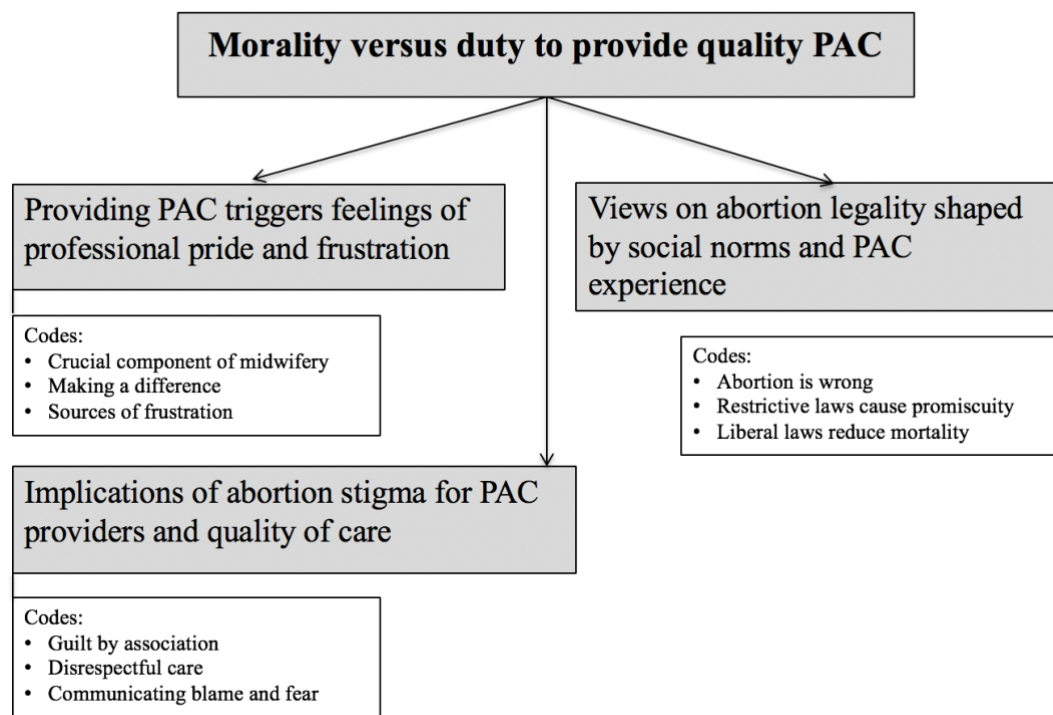
*‘Yeah, if at all he can’t agree with me then he can try another level to get someone who he can try that with, because I am the one who suffered a lot, not he but it’s me, and I am the one who knows my life. I am the one who felt a lot of pain’. (Doreen, 19 years old)*

Although most respondents intended to use contraceptives in the future, few had received contraceptive counselling.

## **7.5 WHAT ARE MIDWIVES’ PERSPECTIVES ON POST ABORTION CARE? HOW DO MIDWIVES PERCEIVE THE QUALITY OF CARE? STUDY III, PAPER IV**

The analysis generated one main theme and three subthemes, illustrated in Figure 3. The boxes beneath each sub-theme contain codes that make up the findings relates to each sub-theme.

Figure 3. Overview of themes and sub-themes



### 7.5.1 Morality versus duty to provide quality PAC (main theme)

The main theme describes the central phenomenon – a conflict between personal morality in relation to abortion and midwives’ professional duty and commitment to provide good-quality PAC. Obtained narratives confirmed midwives’ dedication to prevent mortality and morbidity and to provide good-quality care. Simultaneously, they revealed sentiments reflecting social norms in Uganda that view abortion as unacceptable. Most midwives described PAC as respectful and always provided with dignity. Yet, based on the midwives’ own portrayals of encounters with women seeking PAC, it seemed that quality of care was subject to their own personal feelings toward abortion. Combined with a challenging work environment this conflict of morality and duty appeared to negatively impact the quality of care, especially for women seeking care after an induced abortion.

### 7.5.2 Providing PAC triggers feelings of professional pride and frustration

Providing PAC seemed to render a sense of purpose and professional pride among respondents. The midwives all viewed PAC to be an essential component of midwifery. Concurrently, frustration with the work environment were prevalent; midwives described a work environment plagued by heavy patient loads, lack of human resources and training, inadequate facilities, insufficient equipment and supplies, and low pay. The poor work environment contributed to poor quality of care regardless of how much the midwives tried

to be innovative and do their very best. The situation was portrayed as worst in lower-level facilities and rural settings. Furthermore, emotional aspects of care, seeing many women die, were described by a few midwives as burdensome. Due to personal feelings towards abortion, some midwives found it challenging to care for women with complications from induced abortion. One informant described how it made her feel:

*‘You can come to me and you tell me, “So, I did this and this”. I feel bad, because you can even see my facial expression when I’m talking to you that “Why did you do that?”. But as a healthcare worker, you have to provide care to that person because she is supposed to get that care. So, you provide even if it has hurt you inside. You do what you are supposed to do. Even if you become annoyed, you don’t say anything. So, you give the care, as it is supposed to be.’* Sylvia, 24 years old

### **7.5.3 Views on abortion legality shaped by social norms and PAC experience**

Respondents expressed views on abortion that coalesce with prevailing societal norms in Uganda. These views were rooted in religious opposition to abortion and religion was also mentioned as a reason for supporting a restrictive abortion law. However, the experience of PAC seemed to shape some midwives’ opinions on legality, garnering support for a more liberal abortion law as a way of reducing maternal morbidity and mortality. Nevertheless, all respondents raised concern that a more liberal abortion law would lead to promiscuity and carelessness with increased abortion rates as a consequence. Several respondents voiced ambiguity in regard to legality as illustrated in the following quote:

*‘OK, the law...if they are to pass it...they can pass it, provided it is going to help those who have a reason for removing that pregnancy, that one will be OK. And on the other side is, maybe, and that is my thinking, maybe again it will give opportunity for people to misbehave more and get pregnant more and say, “After all the law is there, even if I get pregnant I will go and remove it”. So, according to me, it has two sides.’* Doreen, 47 years old

### **7.5.4 Implications of abortion stigma for PAC providers and quality of care**

Abortion stigma extended to both midwives and women seeking PAC. Communities’ and law enforcements’ understanding of PAC were described as limited and grounded in misconceptions that associated PAC with induced abortion. According to the respondents views, PAC was just like any other kind of midwifery care. However, a couple of respondents admitted that prior to any PAC experience, they too had misconceptions surrounding PAC and were apprehensive of working in PAC because of its link to abortion.

The midwives had developed strategies to avoid suspicion of being an abortion provider; this was noticeable in the way respondents recounted how and if they discussed their work with others. Some refrained from mentioning PAC at all in order to avoid any guilt by association:

*‘You are general, you just say you are a medical person, you care for women. And they know this is a midwife, and a midwife they know – it’s a baby, child, baby, mother, finish. They do not go beyond that because when you introduce yourself – “I am a musawo [health worker] caring for women who are aborting” – the community will not view you properly, they will query, “What is wrong with her?” So, they [PAC providers] just introduce themselves generally – “I am a musawo, I work in this place, I care for women”, finish’.* Bridget, 41 years old

Midwives generally described PAC as respectful. Concurrently, the respondents appeared confident in the use of fear messages in counselling which made blame and guilt seem ingrained in the provider–patient interaction. There were also accounts of disrespectful care, which the midwives themselves had witnessed, that primarily targeted women who had induced an abortion. Covert disrespect such as delayed treatment, slow care or denied pain medication, were said to be more common than overt displays of disrespect such as verbal abuse. One midwife recounted how she once witnessed how deliberate delays in both diagnosis and treatment led to a young woman’s death:

*‘...But if it was these other conditions [other than induced abortion], I think they would have treated her first. But because of what she had done, somebody may not put the emphasis on you, so, so much, yeah. That attitude is there, though people don’t show it directly, but there is a way that they hear that this is induced abortion, somebody will relax, uhm, will work on you but slowly, not so hurriedly ... not so bad...’*

*Interviewer: ‘But, so, instead, you see maybe the care is the same but slower?’*

*Informant: ‘Yeah, slow, somebody is not so bothered, not hurrying, after all she did it, she wanted it. They would have that attitude.’* Brenda, 35 years old

Respondents explained that experience of PAC led to improved empathy, decreased stigma and dispelled any myths and misconceptions surrounding PAC. Disrespectful care was said to occur because of negative attitudes of individual HCPs, lack of training and poor working conditions.



## 8 DISCUSSION

This thesis sought to identify means for improving access to and quality of PAC through task sharing and by exploring the perspectives of young women and HCPs. Our findings demonstrate that midwives can diagnose and treat 1<sup>st</sup> trimester incomplete abortion with misoprostol as safely and effectively as physicians, and that women's acceptability did not differ between provider types. Furthermore, our findings suggest that gender norms, stigma and gender power relations constrained and influenced young women's reproductive agency and action. The analysis generated an understanding of abortion as an agentic action by which women reclaimed control over their bodies and futures. Finally, our findings exposed a conflict between midwives' personal morality and professional duty and commitment to provide good-quality PAC and revealed challenges within the work environment that hampered the provision of good-quality care.

This thesis provides evidence regarding the safety, effectiveness and acceptability of task sharing in PAC and thereby closes a critical knowledge gap. Furthermore, by elucidating young women's perspectives the thesis contributes to an improved understanding of reproductive agency and abortion circumstances in Uganda. Additionally, we were able to unpack some of the challenges in PAC that impede the provision of good-quality care, based on the perspectives and experiences of midwives. Our findings are of particular importance for settings challenged by health workforce deficiencies and health systems that struggle to provide equitable and good-quality PAC. The findings from this thesis may be used to accelerate progress towards UHC and universal access to SRH services as part of Agenda 2030. Below I discuss the main thesis findings, keeping in mind the thesis framework (Figure 1).

### 8.1 IMPROVED AVAILABILITY AND ACCESS – WHAT ABOUT QUALITY?

We found that expanding the midwifery role in 1<sup>st</sup> trimester PAC using misoprostol leads to safe, effective and acceptable care (139, 140). Our findings have contributed to the WHO guidelines on health workers' role in abortion care, published in 2015, which now endorse midwives to provide 1<sup>st</sup> trimester PAC using misoprostol (141). The recommendation concerning the management of uncomplicated 1<sup>st</sup> trimester incomplete abortion with misoprostol by midwives reads: 'There is evidence from a low-resource setting for the safety and effectiveness (moderate certainty) of this option and for women's overall satisfaction with the provider (moderate certainty) when midwives manage incomplete abortion' (141). Since these guidelines were published, a study in neighbouring Kenya has confirmed our

findings (142). Optimising midwives' role in PAC has great potential for improving women's access to equitable and timely care while promoting the rational use of resources (143). A review of programmatic data on abortion care in 10 countries, show that task sharing with nurses and midwives has improved access to abortion care without weakening quality (144).

The WHO has predicted that the global deficit of HRH will reach 12.9 million by year 2035 (62, 141). Increased availability of HCPs and task sharing initiatives are therefore urgently needed. The findings from Study I, if implemented, would increase the availability of HCPs for PAC and thereby improve women's access to care (140). Still, we must not underestimate the importance of quality as improved access to poor-quality care will not effectively reduce mortality and morbidity (145). The thesis framework (Figure 1) underline how the concepts access and quality are intrinsically linked. Notably, although an insufficient availability of HCPs leads to poor quality of care, the opposite, sufficient availability, does not necessarily lead to good quality of care (146). Thus, realising UHC mandates going beyond the plain numbers of HCPs and addressing gaps in quality, equity, performance and motivation (147). While task sharing with midwives in PAC offers a cost saving and pragmatic solution that may accelerate progress to UHC, doing so requires a sustained focus on the quality of care. This is not an easy task. The findings from this thesis points to several factors that are required to successfully expand midwives' roles in PAC. In particular, midwives' competence and willingness to provide PAC, as well as their personal views related to abortion and their professional role and duty – must be better understood and addressed.

## **8.2 HEALTH SYSTEMS' CAPACITY TO DELIVER GOOD-QUALITY PAC**

In many parts of the world, access to good-quality PAC remains highly inequitable. A study focusing on health systems' capacity to provide PAC in ten countries, including Uganda, revealed inadequate capacity at both primary- and referral-level healthcare facilities to provide basic and comprehensive PAC (51). The midwives who took part in Study IV shed light on the underpinning mechanisms of why, and in what way, the quality of PAC falters. Specifically, our interviews exposed several challenges within the PAC work environment that hampered the provision of good-quality care (148). These kinds of challenges represent systemic failures within health systems and healthcare facilities that lead to poor quality of care and the mistreatment of women (149). Our findings are corroborated by a previous study among PAC providers in Uganda (150), echoing the need for improved working conditions in general, and to scale up the numbers of midwives in rural areas in particular. Many of the health system challenges identified in this thesis have also been identified as obstacles to implementing the WHO recommendations on health workers' roles in abortion

care (151). It is therefore likely that the challenges we identified will undermine efforts to expand midwives' roles in PAC in Uganda and will remain matters of serious concern for both access and quality until the work environment is improved.

Good quality of care requires sufficient numbers HCPs who are both competent and motivated (130). We found that the midwives in Study III became frustrated and dissatisfied when they were unable to provide good-quality PAC (148). This may lead to elevated attrition rates and further diminish access and quality of care (152). Uganda's MoH has recently acknowledged the need to empower nurses and midwives in order to achieve UHC (91). This has resulted in the first Nursing and Midwifery Policy (draft) aiming to advance regulation and training and improve working conditions (153). These are positive developments that will help to resolve the issues that currently plague the nursing and midwifery professions in Uganda, such as unclear scope of practice, weak institutions and leadership, inequitable representation, and unsafe work environments (153). Midwives generally have an in-depth understanding of what is required to improve the quality of care (154), which we also noted in our interviews (148). As long as midwives are left out of decision-making that concerns them, and until midwives' realities are taken seriously, quality of care is at risk (154). Expanding the midwifery role in PAC must therefore be done in conjunction with efforts to improve the work environment and strengthen the midwifery profession. This will enable HCPs to provide good-quality care and subsequently maintain their motivation.

Acceptability of care is linked to patients' confidence in HCPs' competences and judgment about the quality of care (129). Our findings showed that almost all of the women in Study I found the treatment they received to be acceptable regardless of to whom they were randomised (139). These are important findings as women's evaluations of acceptability have bearings on the success of further implementation of task sharing in PAC (151). While women do not seem to place much significance on provider type, existing literature tells us what are of importance in the abortion experience – the clinic environment, HCPs interpersonal skills (155), confidentiality and privacy (151). Our findings concerning acceptability are in line with how previous studies have reported high acceptability of midwifery-led abortion care in both low- (75, 142) and high-resource settings (70). Still, our findings do not tell us how women perceived the quality of care or what their expectations were to begin with. Information on women's expectations and preferences is valuable when striving to improve the quality of care (156); it could facilitate the implementation of task sharing in Uganda and other similar settings. Therefore, a deeper understanding of

acceptability is warranted and future studies should focus on exploring acceptability, preferably through a qualitative lens.

### **8.3 HOW TO ACHIEVE RESPECTFUL PAC FOR ALL**

Principle features of good-quality care are that care is equitable and provided with respect and dignity (130). Existing evidence shows that abortion services rarely apply this type of person-centred and respectful approach due to stigma, institutional regulations and legal restrictions (157). Although PAC is legal in Uganda, our findings suggest that it is not exempt from stigma (148). Specifically, we found that personal morality influenced the quality of care, underscoring the power asymmetry between provider and care-seeker (148). Similar findings have been reported from Ghana, where conflicting religious and moral beliefs about abortion and HCPs duty to provide abortion care, shaped the provision of safe abortion services (158). Religious and moral beliefs, perceptions of one's professional role, and the level of stigma directed at health workers, all influence willingness to provide abortion care (151), and consequently, women's access and quality of care (151, 158, 159). Providing abortion care may bring up existential questions among health workers as well as emotions such as grief, sadness and anger, even in low-stigma contexts with liberal abortion laws (160). Denial of pain medication as a way of dealing with these kinds of emotions and punishing women is a severe abuse of power. So is the neglect that ultimately resulted in the death of a young woman, witnessed by one respondent in Study III (148). Disrespectful reproductive health care has in turn been linked to a lack of accountability (161). Although this thesis did not assess accountability structures, the fact that disrespectful care seemed to occur without any repercussions for the health worker, suggests that there is a lack of accountability in PAC. A policy that promotes accountability and respectful PAC may aid in ensuring equitable access to good-quality care. Furthermore, exercises in 'values clarification' may help HCPs to clarify their values and encourage support for the provision of abortion-related care (162). Thus, when implementing and scaling up task sharing in PAC, exercises aiming at clarifying values could be relevant as well as offering continuous support to HCPs to allow them to regularly reflect on ethical dilemmas in their work.

In addition to combating the social stigma and mistreatment of women who seek PAC, our findings point to a need to address stigma that the HCPs face themselves. The midwives in our study had developed strategies to avoid suspicion of being abortion providers and related stigma, suggesting the presence of perceived stigma and perhaps also internalised stigma. That being said, experienced stigma was uncommon among interviewed midwives (148). Police harassment of health workers providing PAC has been reported to occur in Uganda

(99, 163) and is seemingly common in neighbouring Kenya (164), impacting HCPs' willingness to provide PAC while fuelling abortion stigma (99, 164, 165). The secrecy that stigma incites, in our case surrounding midwives' role in PAC, perpetuates stigma and reinforces the notion of abortion-related care-provision, as devious and unnatural (37). Despite perceived stigma, the midwives in Study III viewed PAC as a natural and essential component of midwifery. Experience of PAC, enabled by mandatory clinical rotation, was said to increase empathy, dispel myths about PAC and mitigate stigma. We also found that PAC experience lead to a tendency, however ambiguous, to support easing legal restrictions on abortion. Mandatory clinical rotations can therefore be seen as having a positive effect on attitudes and increase support for safe abortion (148). In contrast, heavy reliance on in-service training, as seems to be common in abortion-related care (151), in combination with regular clinical rotation has been described as problematic for PAC in Uganda, as the need to constantly train new staff becomes burdensome (150). It has also been argued that forced transfers of HCPs trained in PAC, who have developed positive attitudes towards abortion, pose a threat to the quality of care (163). Strengthening pre-service training and increasing midwives' length of stay in PAC, may mitigate these issues related to clinical rotation.

#### **8.4 POST ABORTION CONTRACEPTION – AN IDEAL YET MISSED OPPORTUNITY**

Several midwives in Study III lamented how their heavy workload often prevented them from providing contraceptive counselling (148). This could explain why so few women in Study II had received contraceptive counselling, despite many expressing a desire to initiate a birth control method and asserting ownership of their contraception decision-making. This renders post abortion contraceptive counselling an ideal, yet often missed opportunity to enable agency and strengthen women's SRHR (136). Findings from several studies indicate that healthcare facilities lack the capacity to provide post abortion contraceptive services and often fail to meet adequate standards of care (51, 166–169). For instance, a study from Uganda revealed that while almost all primary- and referral-level healthcare facilities could provide short acting contraceptive methods (SARCs) only half of referral level facilities could provide long-acting contraceptive methods (LARCs) (51). The findings from this thesis and elsewhere in Uganda describing how young women's sexuality is policed and stigmatised (136, 170–172), together with data on low contraceptive use and heavy reliance on SARCs (96), might explain the high abortion rates among sexually active adolescents (74.4 abortions per 1,000 women) in Uganda (173). Considering the early return of fertility post abortion (174) and women's own desires to prevent further pregnancy (136), there is an urgent need to seize this opportunity and integrate contraceptive counselling into PAC with

the full range of methods available and on offer.

Fear messages in health communication, also known as fear appeals or scare tactics, aim to create behaviour change by inciting fear. Although fear messages are based on weak scientific evidence, they are still commonly used (175). The midwives in Study III seemed confident in the effectiveness of fear messages, which they appeared to use frequently when counselling women who had induced an abortion (148). Similarly, studies from Kenya (176) and Zimbabwe (177) found that health workers in PAC blamed women who had abortions for what has happened to them, disregarding the root causes of unintended pregnancy and abortion such as poverty, stigma and gender power relations. Interestingly, Chiweshe et al. (177) described how PAC providers in Zimbabwe acted as social regulators who punished women who had had abortions. They did so through humiliation, discouraging them from having abortions, and by telling women how wrong they were, while positioning themselves as helpers and sympathisers. In congruence with our findings, the HCPs insisted they were professional in their patient encounters. We did not perceive that the midwives in Study III used fear messages out of malice – nevertheless, their reliance on scare tactics point to an urgent need to improve the quality of post abortion counselling. Like Chiweshe et al. (177), I argue that quality improvements must be made in conjunction with reflections among HCPs about power relations and the social circumstances under which women undergo abortions in Uganda. Our findings from Study II may provide a base for these discussions.

## **8.5 ENABLING REPRODUCTIVE AGENCY AND ACTION**

Our findings reveal how stigma and gender power relations, fostered by inequitable gender norms, constrain young women's reproductive agency and create vulnerability to unintended pregnancy and unsafe abortion (136). Numerous studies have documented the negative influence of gender norms on gender equality, health and well-being across the life course, particularly for adolescent girls and young women (170, 178–182). In Uganda, gender norms are established at a young age and have been found to significantly impede adolescents' agency (171, 172, 183), resulting in a heightened risk of sexual violence and coercion, pregnancy and HIV infection (172). What our findings add to this body of evidence is how vulnerability is transformed into action, in spite of, or because of, the power asymmetry within which agency is enacted. They also contribute to an understanding of secrecy as enabling agency and harming women at the same time (136). A recent study from Kenya conclude that young women responded to internalised and perceived stigma by prioritising their own health needs and going through with an abortion (184). This strengthens the notion of abortion as an agentic action (136) and that 'agency for power' is not only enacted from

dominant positions, but also from an inferior position as resistance (135). However, we saw that stigma also pushes women toward abortion which reinforces our appreciation of agency as complex and contradictory, with many different push and pull factors asserting themselves simultaneously. This fits well with how Ortner described ‘agency for projects’ and ‘agency for power’ – as intertwined and either blending or bleeding into each other (135). Irrespective of the reasons women undergo abortion, asserting one’s reproductive agency through abortion in the Ugandan context comes with a price in the form of health risks, possibly derailing young women’s quests for education and social mobility (136, 163). These negative consequences could be easily averted if women were enabled to make safe SRH decisions, free of coercion and the pressure to conform to prevailing gender norms in Uganda.

Adolescent girls and young women face persistent barriers in seeking and obtaining quality SRH care (39, 176). We found that perceived stigma and financial constraints were critical barriers to seeking timely PAC for young women, which amounted to care-seeking delays, 2<sup>nd</sup> trimester abortions and the use of herbs to manage complications (136). The Guttmacher Institute estimated the abortion incidence among adolescents in Uganda between 2003 and 2013. The authors hypothesised that adolescents’ care seeking and PAC experiences differed from that of older women; that adolescents faced larger difficulties in accessing care, presented with more severe complications, and received contraception to a lesser extent. Interestingly, the results revealed no such differences. It is important to note, that although the authors controlled for pregnancy intentions, they could not fully distinguish abortion complications from spontaneous or induced abortions (173). Based on the findings from the present thesis, I speculate that it is women who have induced an abortion, regardless of age, who are most disadvantaged; who present with more severe complications at a later gestational age; and who end up with the poorest PAC experiences. Moreover, I speculate that, just like for women who give birth (149), factors such as age, gender, socio-economic status, marital status and ethnicity, intersect to influence their abortion experience. Applying the concept of intersectionality (185), as has been done to for HIV risk among immigrant women with mental illness (186), may yield greater appreciation of the ways multiple stigmatising identities intersect to influence adolescent girls’ and young women’s experiences of abortion and PAC.

Ugandan society places expectations on women that are rooted in patriarchal gender norms (187). Yet, these expectations are distinctly different from what young women want for themselves, such as education and employment outside of the home (136, 187). It is within this context many women choose to have an abortion (136, 188). Childbearing at a young age

not only impedes women's educational and economic opportunities it also involves health risks (189). In order to improve life opportunities and accelerate socio-economic transformation, the government of Uganda has committed itself to turning the country's young age structure into a 'demographic dividend' by investing in contraception and education (190). These investments are vital, however, I argue that real change cannot be achieved without empowering women and girls by ensuring their access to quality SRH care including safe abortion and PAC. This should be at the forefront of Uganda's priorities. Our findings emphasise the need to address gender norms that stigmatise young women's sexuality, create sexual vulnerabilities and push women to perform clandestine unsafe abortions. They also make a strong argument for enabling reproductive agency and empowering women through access to safe and legal abortion and contraception. The ultimate outcome of empowerment, however, is the capacity to choose if, when and with whom one has sexual relations and becomes pregnant, and whatever happens with an eventual pregnancy (191). Thus, women should not only be empowered to prevent or end a pregnancy they should also be enabled to carry a pregnancy to term if it is their wish, without risking stigma, violence or a life in poverty.

## **8.6 UPHOLDING COMMITMENTS AND REALISING UHC**

The recently published Guttmacher-Lancet Commission report on SRHR by Starrs et al. states that in order for women to achieve their reproductive health, they must be able to realise their sexual and reproductive rights. These rights include the ability to make decisions about their own bodies and to receive respectful and high-quality care (1). In spite of a legal and policy framework that supports women's right to abortion and access to PAC (99, 100), our findings expose a gap in the Ugandan government's commitments to improving access and quality of reproductive healthcare, and the actual capacity of the health system to meet women's SRH needs (136, 148). However, our findings also offer a pragmatic and resource-saving response with the potential of improving access to PAC and accelerating progress towards UHC (139, 140). Starrs et al. contend that an essential package of SRH services is needed in order to achieve equitable healthcare access that is inherent in the UHC framework; this must include neglected issues such as adolescent sex, GBV, safe abortion and PAC (1). I agree with this argument, and would add that neglecting these issues constitutes a form of discrimination against girls and women, and intensifies abortion stigma. Without addressing all the issues that impact the SRHR of women and girls, Agenda 2030 cannot be realised (192). Integrating SRHR in UHC is not just a means to an end – it is a matter of fulfilling and protecting human rights (193).



In March, 2019, the African Union reaffirmed its commitment to UHC and urged its member states to increase domestic financing for health (194). The United Nations Human Rights Council has also urged Uganda to increase its spending on health to 15%, in line with the Abuja Declaration, in order to improve access to SRH care (195). Still, the budget for health keeps fluctuating around 8–10% and out-of-pocket spending remains at unacceptably high levels (196). Furthermore, the country has been urged to uphold and protect the SRHR of women and girls, in compliance with its human rights obligations and commitments. This includes clarifying its abortion laws and implementing the MoH standards and guidelines on reducing morbidity and mortality due to unsafe abortion (197). The Ugandan government aspires to achieve UHC and for the nation to become an upper-middle-income country by year 2040, also known as ‘Vision 2040’ (89, 127). Whether or not the country will be able to realise its economic and development vision depends on the extent to which it invests in, protects and promotes the health and well-being of women and girls (9, 198). Our findings indicate that Uganda still has a long way to go in terms of upholding commitments to SRHR and realising UCH. Required efforts include addressing harmful gender norms and power asymmetries, reducing stigma, and fully integrating safe abortion and high quality PAC in its UHC efforts. The findings from this thesis may be used to support and guide improvements in access and quality of PAC, as well as endeavours to protect and promote the SRHR of women and girls in Uganda.

## **9 METHODOLOGICAL CONSIDERATIONS**

Using both qualitative and quantitative methods, and including the voices of young women and HCPs, allowed us to approach the thesis aim from several angles. In the following section I discuss the strengths and limitation of the methodological choices underpinning this thesis.

### **9.1 STUDY I (PAPERS I AND II)**

Randomised trials are viewed as the gold standard of generating evidence from comparing treatment effects. A trial can be said to be valid if the observed difference between treatment groups can be attributed to the intervention, whereas reliability concerns the repeatability of the methods and results. The ability to apply study results to a broader population is termed generalisability or external validity (199). What follows is a discussion of the main aspects that strengthen and limit the validity, reliability and generalisability of findings from Study I.

#### **9.1.1 Design and equivalence margin**

The randomised design and adequate statistical power strengthens the validity of this equivalence trial. Choosing the equivalence margin has been described as the most difficult aspect of designing an equivalence trial (200). The chosen margin must be clinically relevant, defined a priori and taken into account in the sample size calculation (201). The chosen equivalence margin of -4% to +4% was based on clinical significance related to the treatment outcome; it was also considered in the sample size calculation. Furthermore, the chosen equivalence range is relatively narrow, which is a strength of this study.

#### **9.1.2 Recruitment and retention**

How PAC was organised varied between study sites, which meant that the point of entry for women with pregnancy complications also differed. We made efforts to sensitize all hospital and HC staff to direct women with signs of 1<sup>st</sup> trimester incomplete abortions, to sites where study providers were located. Still, we cannot be absolutely certain that all the potentially eligible women presenting at each study site were screened. In addition, the study sites were located in different settings, and rural inhabitancy proved challenging for retention. HCPs were advised to only include women who were willing to come back for follow-up and who could provide a contact number, which could have created an inclusion bias. Despite these challenges, the loss to follow-up was relatively small at all sites. Furthermore, the analysis of women lost for follow-up did not reveal any major differences when compared with women

who were followed up. I and or the study coordinator made regular visits to all study facilities. During these visits, we discussed strategies to reduce loss to follow-up and any difficulties that the HCPs were experiencing. I speculate that this kind of close monitoring, which allowed for the early detection of any issues and challenges, contributed to the success of this trial.

### **9.1.3 Blinding**

The study design did not allow for blinding of the HCPs or participants, which can be seen as a limitation. One of the reasons for conducting this trial was health worker shortages in Uganda. Consequently, the low availability of HCPs also impacted the study procedures; the numbers of midwives and physicians at each facility were not sufficient to allow for blinding of the outcome assessor. If the same HCP that conducted the diagnosis and treatment also conducts the follow-up assessment, detection bias can be introduced. It can also introduce information bias in the form of social desirability on the part of the women and the HCPs. In order to reduce the risk of introducing bias, we encouraged the HCPs to, as far as possible, let a HCPs different from the one responsible for diagnosis and treatment, do the follow-up assessment. This was a pragmatic solution to a problem inherent in the study context that may or may not have completely diverted the risk of bias. Still, we had to adjust to realities in Uganda in order to carry out this trial, and I argue that despite this shortcoming, the results remain valid.

### **9.1.4 Intention-to-treat versus per protocol analysis**

ITT analysis is the preferred analysis for preventing attrition bias and it is the favoured analysis method in superiority trials. In equivalence trials, however, ITT analysis is cautioned against due to risk of biasing results toward demonstrating equivalence (202). This assumes that the frequency of non-compliance is distributed equally between study groups. Non-compliance can, however, be rather complex and it has been argued that the underlying mechanisms of non-compliance can influence the direction of bias in more than one way (203). If applying a stricter definition of the ITT population than we did in Study I, both unplanned cross-overs and participants lost to follow-up should be regarded as treatment failures and included in the ITT analysis (202). This would have tilted such an analysis toward showing higher effectiveness in the physician group and toward demonstrating non-equivalence. This is because the number of women lost to follow-up were more than twice as many in the midwife group compared with the physician group. We speculate that the reasons for this discrepancy lie in differences in social status between the two professions and in

HCPs' abilities to convey the significance of the follow-up. Remember, the number of midwives were more than twice of that of the physicians and so a larger variation could have existed within the midwife group. Further, we have reason to believe that the most likely reason women did not return for follow-up was because the treatment was successful. I therefore argue that our definition of the ITT-population and our choice of a PP-analysis, was justified. We had two crossovers that we discovered during a review of a logbook. Interestingly, these crossovers were due to the absence of a physician; therefore, the midwife decided to diagnose and treat the patients herself. Although crossovers are undesirable, in our case, their occurrence underline the need for scaling up the implementation of the thesis findings.

### **9.1.5 Differences between study sites and individual HCPs**

The length of PAC experience varied between study groups. Although all HCPs received PAC training the standard of care might still have differed between individual providers. We collected data for each study site but did not collect data on health worker-level for each participant. This could have improved our understanding on how the standard of care differed between individual HCPs and the study sites. However, by treating study group as a fixed effect and study site as a random effect in the generalised linear mixed-effects model, we were able to adjust for differences between sites to some extent. That the study sites and HCPs differed on several aspects can be seen as a limitation; however, it can also be regarded as a strength, as we could show that despite these dissimilarities, the risk difference between intervention and control – including the 95% CI – fell entirely within the pre-defined equivalence margin.

### **9.1.6 Generalisability/external validity**

The sample size, power, and small loss to follow-up strengthens the generalisability of Study I. The design being a multi-centre study carried out in different districts in various settings and at different levels of the health system, further strengthens the generalisability of the findings. Researchers have applied a similar methodology in the Kenyan setting, with similar results (142). In addition, the overall success rate reported in Study I is consistent with rates reported in previous studies (53, 54). Several contextual factors, such as HCPs' positive attitudes towards misoprostol and task sharing, contributed to the success of this trial. Attempts to expand health worker' roles in PAC should be made in combination with careful consideration of the context and factors that may impact the implementation. One critical

aspect are the educational backgrounds and scope of practice of health workers, particularly the midwives, which may differ significantly between settings.

## **9.2 STUDIES II AND III (PAPERS III AND IV)**

One way to address and discuss the trustworthiness of qualitative research is through assessing four criteria: credibility, dependability, transferability and confirmability/reflexivity. Credibility asks whether the findings are congruent with reality, whereas dependability concerns repeatability of the methods. Transferability regards the extent to which the findings are transferable to other settings and populations. Finally, reflexivity concerns issues related to the researchers' subjectivity and its influence on the research process and findings (204). Below follows a discussion of the main aspects that strengthens and limits the trustworthiness of the findings from Study II and III.

### **9.2.1 Research team**

The research teams consisted of female researchers from both Uganda and Sweden. Each researcher had a wide range of experience with qualitative and quantitative research from both low- and high-resource settings; thus, each person provided her own unique perspective. All of the team members who conducted study II and III were involved from conception, through data collection, interpretation and write up, which strengthens the credibility of the findings. Dependability is further strengthened by a thorough description of the methodology, how the findings were reached and ethical considerations, as provided in the thesis method and findings sections.

### **9.2.2 Triangulation**

Method triangulation is suggested as a means to improve both credibility of the findings (204). Study III was first designed as a qualitative study with both FGDs and IDIs. After comments from the ethical review board about concerns related to the sensitivity of the topic, this was changed to IDIs only. FGDs could have provided knowledge on how midwives collectively perceived and discussed the PAC work environment and quality of care. Using this type of approach – and perhaps triangulating with different data sources such as physicians, nurses and healthcare facility managers, and using member checks – could generate new knowledge and strengthen further studies on the topic of quality of care.

We planned to include IDIs with the women's partners in Study II, however, we did not succeed in recruiting enough male participants. Future studies may want to involve men; however, the sampling strategy and source must be carefully considered.

### **9.2.3 Recruitment**

We changed the recruitment strategy in Study II as described in the methods section. This meant that some women who initially expressed interest in participating never did so. Consequently the duration between the initial approach and the actual interview varied from one interview to the next. This might have influenced the findings as memories of events may change over time. However, based on obtained narratives, I contend that the respondents' abortion experiences were profound, sometimes traumatic, thus memories of events are unlikely to fade within just a few months. Furthermore, a change in recruitment strategy was necessary in order to adhere to the ethical principles of respect for autonomy and non-maleficence.

### **9.2.4 Outsider perspective**

Scholars have underlined the asymmetrical relationship that exists between researchers and study participants (205). In our study, the power imbalance in the researcher-participant relationship might have been amplified by me being a Swedish researcher and midwife in the Ugandan context. Nonetheless, I found that being an outsider was positive in the sense that participants in Studies II and III were keen to explain the Ugandan context to me. Being an outsider meant I was dependent on help to recruit and interview non-English-speaking participants for Study II, and although all the interviews in Study III were conducted in English, the perspective I had when conducting and interpreting these interviews was still that of an outsider. When using an interpreter, nuances and connotations might be lost. The research assistant involved in Study II was a young Ugandan woman with previous experience of qualitative research. Following the interviews we conducted together, we shared reflections and discussed aspects that stood out, which helped me gain a deeper understanding of the socio-cultural context as well as nuances within each interview.

### **9.2.5 Use of theory**

We found Ortner's work on agency (135) to be relevant to the Ugandan setting and to issues concerning young women's SRH as it pays attention to the way power relations shape agency without necessarily determining action. I believe that the use of theory in Study II added a level of complexity in our understanding of agency that otherwise might not have been achieved. There are different ways of using theory in qualitative research. One alternate approach would have been to apply a theoretical framework earlier, during the conceptualisation of the study or in the analysis process. As we knew little about reproductive agency in Uganda, we decided to use theory to improve our understanding of how the

concept of agency can be understood when applied to unintended pregnancy and unsafe abortion (in this particular setting). In the future, it might be interesting to apply a theory on agency in an earlier stage of the research process.

### **9.2.6 Transferability**

The data we obtained provided a rich description of the phenomenon's under study, which strengthens the credibility and transferability of the findings. Nevertheless, including more study sites in peri-urban and rural settings might have generated a wider spread of participants with different experiences and backgrounds. We have attempted to provide a thorough description of the context, methodology and how the findings were reached, which may help the reader to make inferences about its transferability.

### **9.2.7 Reflexivity**

Research is inevitably shaped by the researchers, their backgrounds, and contexts. Reflexivity has therefore been an important part of my work in this thesis. I view reflexivity to be a continuous process of reflection, which begins as early as the study conception. Sweden and Uganda provide quite different possibilities for women with regards to SRHR, education and other life opportunities. Being from a relatively liberal and low-stigma context with progressive abortion laws, I grew up taking my reproductive agency for granted. Conducting Study II in particular, made me reflect on my privilege and greatly improved my understanding of gender and how related inequalities and inequities disadvantage women and girls. During recruitment, I was aware of my status when presenting myself as a researcher and a HCP. I noted that some young women were reluctant to participate, which could be related to stigma and the legal environment, but perhaps also to who I am. Concurrently, some young women may have chosen to talk to me because of who I am. Following each interview, I wrote down my reflections and feelings so as to make them explicit. These reflections made me more aware of my own subjectivity and how this may have impacted on the interview. In addition, these notes were helpful as it enabled me to recall important issues in the interviews, which may not have been apparent in transcripts. When conducting interviews, I had already spent some time in Uganda. My pre-understanding of the context was thus based on both theory and lived experience. I believe this helped me when approaching potential participants and gave me time to reflect on how 'being me' might influence recruitment and interpretation of the collected data.

## 10 CONCLUSION

By focusing on task sharing in PAC using misoprostol, this thesis closes a critical knowledge gap – an action that is much needed in order to improve access to care. Furthermore, by elucidating the perspectives of young women and HCPs, this thesis provides important insights and improved understanding of reproductive agency and the quality of PAC. These findings may inform and guide future efforts to improve access and quality of PAC, as well as endeavours to enable reproductive agency and protect the SRHR of young women.

Our findings demonstrate that diagnosis and treatment of 1<sup>st</sup> trimester incomplete abortions with misoprostol is equally safe, effective and acceptable to women when midwives provide care compared with physicians. Furthermore, we found that women's acceptability was high and associated with treatment experience and outcome, and not with the type of provider.

Gender norms and power imbalances created sexual vulnerability and constrained young women's reproductive agency. Abortion decision-making and action occurred within a power asymmetry in which women navigated between gender norms and expectations, health risks, stigma, and their own desires for the future. Although women portrayed abortion as their only, and least-wanted option, abortion was also depicted as an agentive action whereby women reclaimed control of their bodies and futures. Secrecy enabled agency but also incurred risk taking, and many women struggled to access PAC due to perceived stigma and financial constraints. The experience seemed to shape the discourse surrounding contraceptive decision-making and intentions.

Midwives described PAC as a natural part of midwifery and providing PAC generated feelings of pride. However, personal morality in relation to abortion conflicted with midwives' professional duty and commitment to provide good-quality care. Furthermore, poor working conditions impeded the provision of good-quality care, which caused frustration among the midwives. PAC experiences seemed to increase midwives' support for easing legal restrictions on abortion and was said to improve empathy and reduce stigma. Abortion stigma targeted women who were suspected of having induced an abortion but also extended to HCPs. Some midwives were witnesses of mistreatment of women in the shape of deliberate care delays and denial of pain medication.



# 11 RECOMMENDATIONS

By identifying means to improve access and quality of reproductive healthcare this thesis may aid in accelerating progress towards Agenda 2030. However, several actions are warranted and the recommendations are as follows:

## 11.1 For policy and practice

- Safeguard access to safe and legal abortion care of high quality. This includes clarifying the legal and policy environment by re-releasing the standards and guidelines on the reduction of morbidity and mortality in relation to unsafe abortion.
- Sensitise women, communities, health workers, policy-makers and law enforcement on the legal rights of girls and women in relation to abortion and PAC.
- Strengthen pre-service training in PAC for nurses and midwives in particular
- Create an enabling work environment by ensuring that HCPs are sufficient in numbers and have adequate time and resources to provide good-quality care.
- Scale up implementation of resource-saving interventions such as task sharing in PAC using misoprostol and MVA.
- Equip healthcare facilities and HCPs to deliver good-quality contraceptive counselling in which both SARCs and LARCs are available and on offer.
- Increase focus on prevention in PAC by strengthening the ‘community and service partnership’ element in the PAC-model.
- Increase efforts to ensure stocks of high-quality misoprostol and MVA kits
- Engage HCPs involved in task sharing, in monitoring, evaluation and policy-making in order to ensure that care provided is of good-quality and that HCPs have sufficient support and training.
- Implement the drafted nursing and midwifery policy to clarify the professions’ scope and practice and strengthen their legitimacy, social positioning and career development.
- Draft and implement policies on respectful PAC and accountability in reproductive healthcare in order to prevent mistreatment of women seeking PAC and hold those responsible to account if or when it occurs.
- De-stigmatise abortion among HCPs through sensitisation, exercises in values clarification and reflections surrounding ethics, power relations, gender norms and attitudes related to abortion. Reflections of ethical dilemmas should be integral to practice and occur on a regular basis.

- De-stigmatise adolescent pregnancy, pregnancy due to rape and pregnancy in cases of paternal denial, within communities and among health professionals.
- Implement policies that enable pregnant schoolgirls who wish to carry their pregnancies to term to do so and then return to complete their education. This must be done in conjunction with de-stigmatising interventions and perhaps also financial support structures.
- Implement and enforce gender-positive laws and policies in order to progress gender equality and equity. Prevent and counteract harmful gender norms through mandatory comprehensive sexuality education and by engaging parents, their children and the school environment.

## **11.2 For research**

- Further exploration of agency – how the concept can be applied and understood in relation to gender and SRHR, and how it can be measured and evaluated – is recommended.
- Improved understanding of institutionalised stigma and its consequences for women in PAC is needed. Further studies that assess quality of PAC should continue to explore the role of stigma.
- Further research on experiences of abortion and PAC could apply the concept of intersectionality as it may yield greater appreciation of the ways multiple stigmatising identities intersect to influence the abortion experience.
- Identify strategies that effectively counteract and diminish harmful gender norms and empower young girls and boys to act outside of established norms.
- Exploration of different harm reduction models, including self-management and online abortion services, and their feasibility in the Ugandan context, could help improve access to safe abortion and improve abortion outcomes.
- Further explore women's acceptability of task sharing and PAC through qualitative methodology in order to gain better appreciation of women's expectations, values and preferences.
- Investigate means to improve uptake of post abortion LARCs
- Investigate dose and treatment interval of misoprostol for treatment of 2<sup>nd</sup> trimester incomplete abortion and feasibility of task sharing in 2<sup>nd</sup> trimester PAC.

## 12 SUMMARY IN ENGLISH

The last few decades have seen remarkable global progress in relation to sexual and reproductive health and rights (SRHR). Worldwide, maternal survival has improved. Yet progress has been uneven, and many countries failed to reach global targets of a reduction in maternal mortality with 75% by 2015. The more comprehensive, Sustainable Development Agenda 2030 (Agenda 2030) is promising as it includes targets focusing on gender equality and ensuring universal access to SRHR. The success of Agenda 2030 depends on nations' commitment to reducing social inequities and subsequent investment in women's, adolescents' and children's health and lives. Universal Health Coverage (UHC) is a cornerstone of Agenda 2030 that promises to leave nobody behind in terms of access to healthcare. It has been argued that issues such as safe abortion and post abortion care (PAC) have been overlooked in efforts to achieve UHC. Today hundreds of millions of women around the world still lack the ability to make safe sexual and reproductive health choices.

The government of Uganda has committed to attaining a demographic dividend by investing in contraception and education. Uganda's efforts to advance progress toward the global targets in relation to reproductive health, have resulted in the increased availability of healthcare providers (HCPs) – nurses and midwives in particular – shorter distances to healthcare facilities, increased contraceptive use and increased maternal survival. Still, the current speed of the population growth, consistent shortages and the maldistribution of HCPs means that supply struggles to meet population needs. Moreover, unsafe abortion remains a serious public health issue causing significant harm to women's and girl's health. PAC includes treatment of abortion complications owing to either spontaneous or induced abortion, and the provision of contraception. PAC is legal, and provided by nurses, midwives and physicians. Research and government reports from Uganda suggest that many women lack access to PAC, and that quality of care is sub-standard.

Strengthening the health workforce and increasing access to safe abortion and good-quality PAC have been put forward as priority interventions for women's health. This thesis aimed to identify means to improve access and quality of PAC in low-resource settings, through task sharing and by exploring the perspectives of young women's and HCPs. The thesis builds on a multi-centre randomised controlled equivalence trial, and in-depth interviews with young women seeking PAC as well as health workers providing PAC. Study I was conducted in six healthcare facilities in six different districts in the central region of Uganda. Studies II and III were conducted in a national referral hospital in the capital of Kampala.

Study I aimed to investigate safety, effectiveness and acceptability of the diagnosis and treatment of 1<sup>st</sup> trimester incomplete abortion with misoprostol, by midwives compared with physicians. We hypothesised that midwives are able to diagnose and treat 1<sup>st</sup> trimester incomplete abortion with misoprostol as safely and effectively as physicians and that there would be no difference in women's acceptability between study groups (midwife versus physician). Our findings demonstrate that the diagnosis and treatment of 1<sup>st</sup> trimester incomplete abortion with misoprostol was equally safe and effective when care was provided by midwives compared with physicians. Furthermore, we found that women's acceptability was high, and associated with treatment experience and outcome and not with type of HCP.

Study II aimed to explore young women's reproductive agency in relation to their experiences of unintended pregnancy and unsafe abortion. We specifically wanted to know how the social environment shaped young women's reproductive agency and actions, and under what circumstances abortion was conducted and post-abortion care was sought. We interviewed young women between the ages of 15–24 seeking PAC due to complications from induced abortion. Our findings show that gender norms and unequal power relations created sexual vulnerability and constrained young women's reproductive agency. Agency and action occurred within a power asymmetry in which women navigated between gender norms and expectations, health risks, stigma, and their own desires for the future. Though women portrayed abortion as their only and least-wanted option, it was also depicted as an agentive action intended to reclaim control. Secrecy enabled agency but also incurred risk taking. Many women struggled to access care due to perceived stigma and financial constraints. The experience seemed to shape discourse surrounding contraceptive decision-making, with women claiming ownership over contraception decision-making.

Study III aimed to explore midwives' perspectives on PAC. We specifically wanted to enhance our understanding of the quality of care. We interviewed midwives providing PAC. The midwives were asked to reflect on their PAC experiences from current and previous employment in rural and urban Uganda. Our findings suggest that access to quality PAC is inequitable in Uganda due to poor working conditions and the presence of abortion stigma. Personal morality in relation to abortion conflicted with midwives' professional duty and commitment to provide good-quality care. PAC experience, facilitated by regular clinical rotation, seemed to increase their support of easing legal restrictions on abortion, and was said to dispel misconceptions around PAC and increase empathy towards PAC-seeking women. Abortion stigma targeted women who were suspected of having induced an abortion

but also extended to HCPs. Some midwives were witnesses of mistreatment of women seeking care.

By focusing on task sharing with midwives in PAC using misoprostol, this thesis closes a critical knowledge gap – necessary to reduce maternal mortality and morbidity in Uganda. Furthermore, by elucidating the perspectives of young women, this thesis provides improved understanding of young women's reproductive agency, the power relations in which agency is enacted as well as its consequences. Finally, by seeking the perspectives of HCPs, we gained insights into the quality of PAC and the role of abortion stigma. These findings may inform and guide future efforts to improve access and quality of PAC, as well as endeavours to promote and protect young women's SRHR.

## 13 SUMMARY IN LUGANDA

Mu myaka ejiyise wabaddewo encukacuuka eyanamaddala mu mpereza eyeby'obulamu ebikwata ku kuzaala munsu yonna (SRHR). Munsu yonna, okuffa kw'abakyala olwensoga ezekukuusa ku kuzaala kukendedde. Yade, okukendera kuno sikwekumu mu mawanga gona, naye ate amawanga mangi gakyalemeddwa okukendeza omuwendo ogwa abakyala abafa olwensoga ezekukuusa ku kuzaala ogwensi yonna ogwe 75% nga 2015 tanatuuka. Enteekateeka namutayiika ey'okunyikiza eby'enkulakulana munsu yona eya 2030 (Agenda 2030), erimu esuubi kubanga eraga amawanga gyegalina okutuukiriza emiwendo ejikwata kutumbula omwenkanonkano ogwa abakyala n'abaami wamu n'okulaba nti eby'obulamu ebikwata ku kuzaala awamu ne ddembe erigwa mukowa eryo bituuka kubiri oyo ebyetaaga. Okutukiriza ebirubirirwa bye enteekateeka namutayiika ey'okunyikiza eby'enkulakulana munsu yona eya 2030, kwesigamiziddwa ku kwewayo kwamawanga okukendeza obutali bwenkanya mu engeri gyegalabiramu abantu baago n'okwongera okussiga ensimbi muby'obulamu abikwata ku bakyaala, abavubuka wamu nabaana abato. Okutuusa eby'obulamu kubuli muntu nsonga nkulu munteekateeka namutayiika ey'okunyikiza eby'enkulakulana munsu yona eya 2030 esubiza obutaleka muntu yenna mabega kukyokufuna obujjanjabi. Kigambibwa nti ensonga ezimu nga ey'okujjamu embuto mungeri ekirizibwa mu kutendekebwa kwa abasawo awamu n'okuwa abo abavuddemu oba abejeemu embuto obujjanjabi obulungi (PAC) tezituliddwa nga emiramwa emikulu egyokutukirizaa ekigendererwa ekyokutuusa obujjanjabi kubuli muntu. Wetogerera, obukadde n'obukadde obwa abakyala munsu yonna tebayina busobozi okwesalirawo ku by'obulamu ebikwata ku kuzaala.

Gavumenti ya Uganda, yewayo okutwala obunji bwabantu ebeyongera mugwanga nga omukisa ogw'okufuna enkula kulana muggwa nga eyita mukuteeka sente mu nkenkola eziyiza abakyala obutafuna mbuto zebateyagalidde ne mubyenjigiriza. Amanyi gavumenti ya Uganda getadde mukutukiriza emiwendo egyensi yona egyikwata ku tumbula eby'obulamu ebikwata kukuzaala, galabikira mu bunji obwabasawo ebeyongedde mu malwarilo naddala ba naansi na nabazaalisa, obunji bwamalwaliro, obunji bwekonkala eziziyiza abakyala obutafuna mbuto obweyongende mu malwaliro awamu nemiwendo egyabakyala abafa nga bazaala ejikendedde. Wabula, mukaseera kano okusinzira kubunji bwa bantu obweyongera mu gwanga nga kwogasse ebbula lyabasawo eri kyali mubitundu ebitali bimu kitegeza nti okutuusa eby'obujjanjabi eri abantu kukyali mu obuzibu. Okwongera kwekyo, okujamu ebunto mu ngeri ey'obulabe ekyali nsonga nkulu muby'obulamu era etuusizza obulabe bungi eri obulamu bwa abakyala n'abaana abawala. Okuwa abo abavuddemu oba abejeemu embuto obujjanjabi

(PAC) kutwaliramu okujjanjaba obuzibu obuvudde kukuvaamu kw'olubuto nga mw'otwalidde embuto ezivuddemu zoka neezo zebajjeemu obujji, era n'okubawa enkola eziziyiza obutafuna mbuto zebateyagalidde. Kiri mu mateeka okuwa obujjanjabi abo abavuddemu embuto okuva eri omusawo yenna kaabe nnaansi, omuzaalisa oba ddokita. Ebiva mukunonyereza ne alipoota eza gavumenti ya Uganda biraga nti abakyala bangi tebafuna bujjanjabi nga bavuddemu oba nga bajjeemu embuto era abo abegezaako okubufuna omutindo gwabwo tegumatiza.

Okwongerera amanyi mu bukugu obwabasawo awamu n'okwongerera okutuusa obujjanjabi obw'okujjamu embuto era n'okuwa abakyala abavuddemu oba abajjeemu embuto obujjanjabi byebimu kubitereddwa ku mwanjo okutumbula eby'obulamu byabakyala. Ekitabo kino kyagenderera okuzuula engeri ezitalizimu eziyinda okutumbula omutindo awamu n'okutuusa obujjanjabi obuwebwa abakyala abavuddemu oba abajjeemu embuto (PAC) mu mawanga agacakula, nga tuyita mu enkola ey'okugabana eby'okukola oba emmirimu mu basawo awamu n'okuzuula engeri abakyala abato ne abasawo jebalamu enkola eno. Ekitabo kiwandikibwa okuva mu kunonyereza okwekikugu okwalimu okubuuza ebibuuzo abakyala abato abali bafuna obujjanjabi obuwebwa abakyala abavuddemu oba abajjeemu embuto (PAC) n'abasawo abawa obujjanjabi buno. Okunonyereza okwasooka kwakolebwa mu malwaliro mukaaga nga ggava mu disitulikiti mukaaga mu kitundu kyamasekati ga Uganda. Okunonyereza okwokubiri n'okwokusatu kwakolebwa mu eddwaliro ekulu erya Mulago mu Kampala.

Okunonyereza okwasooka kwagenderera okuzuula obuzibu, obulingi awamu n'obumativu eri enkola ey'okuzuula n'okujjanjaba abakyala abavuddemu oba abajjeemu embuto ezemyezi esatu n'okuka wansi naye nezitagwamu nga tukozesa eddagala erya misoprostol, era nga tugerageranya obujjanjabi obuwebwa bw'omusawo omuzaalisa ne ddokita. Twatebereza nti omusawo omuzaalisa asobola bulungi okuwa obujjanjabi buno mungeri eyekikugu nga ddokita era tewali njawulo mubumativu eri abakyala okusinzira ku ani abawadde obujjanjabi (muzaalisa oba dokita). Ebyava mu kunonyereza kwaffe biraga nti obujjanjabi obwawebwa abazaalisa tebwalina buzibu era bwali bulungi bw'ogerageranya n'obwo obwawebwa ba ddokita. Okwongerako, era twazuula nti abakyala baali bamativu n'obujjanjabi bwebafuna sossi ekika kyomusawo ki eyabakola ko.

Okunonyereza okwokubiri kwagenderera okuzuula okwenyigira kwabakyala abato mu kwetusaako ebyobulamu ebikwata kukuzaala nga tutunira byebayiseemu oluvanyuma lw'okufuna embuto zebateyagalidde awamu n'okujjamu embuto mungeri ey'obulebe. Twayagala okumanya engeri embera omuntu zakuliramu gyeziyinda okucuuusamu engeri abakyala abato gyebenyigira mu kujjamu embuto nabiki byebakola singa benyigira mu

kwetusaako obujjanjabi obwokujjamu embuto, era mumbera ki okussalawo okujjamu olubuto n'okugenda muddwaliro ofuna obujjanji mwe kwakolebwa. Twabuuza abakyala abato okuva ku myaka 15 paka ku myaka 24 abali bafuna obujjanjabi oluvanyuma lw'okufuna obuzibu nga buva mukujjamu embuto. Ebyava mu kunonyereza kwafe biraga nti eby'obuwangwa ebyekuusa kukikula ky'omuntu wamu n'obutenkana bw'obuyinza wakati w'omukyala n'omwami kiretera abakyala okulinyirirwa era kikosa okwenyigira kwabakyala abato mu kwetusaako ebyobulamu ebikwata kukuzaala. Okusalawo okujjamu olubuto n'okufuna obujjanjabi kwakolebwa mukulaga obuyinza bwebalina mukusalawo okwetusaako obujjanjabi nga bawaguza endowooza ez'obuwangwa ez'ekuusa kukikula ky'omuntu, obuzibu bwebayinza okufuna singa baba bajeemu embuto, okusongebwamu ennwe, n'engeri gyebagala ebiseera byabwe eby'omumaasao. Wadde abakyala balangi nti okujjamu embuto sikyebali basinga okwagala, embooji zabwe ziraga nti okujjamu olubuto kyakolebwa nga akabonero okwokwediza obuyinza mu kusalawo. Okukuuma ekyokujjamu olubuto nga ekyama, kyayamba abakyala okusalawo okujjamu olubuto wadde kyabaletera obulabe. Abakyala bangi basanga obuzibu okwetusaako obujjanjabi obw'okujjamu olubuto olwokutya okusongebwamu ennwe n'okuba nti tebalina sente. Byebayitamu mu kujjamu embuto byacuusiza endowooza zaabwe ezetolodde ku kusalawo okukozesa enkola ez'okuziyiza okufuna embuto, nga abakyala bagamba obuyinza obwokusalawo okukozesa enkola ez'okuziyiza okufuna embuto bwabwe.

Okunonyereza okwokusatu kwagenderera okuzuula endoowa n'engeri abasawo abazaalisa gyebali balamu empereza ey'obujjanjabi obuwebwa abakyala abavuddemu oba abajeemu embuto (PAC). Twayagala okumanya omutindo ogw'obujjanji obuwebwa abakyala bano. Twabuuza abazaalisa abenyigira mukuwa obujjanjabi obwa PAC. Abasawo bano babuuzibwa endowooza zabwe ku byebayiseemu nga bawa obujjanjabi bwa PAC mukiseera ekyo nemu biseera ebyemabega mubyalo ne mu bibugga mu Uganda. Ebyava mu kunonyereza kwaffe biraga nti omutindo ogw'obujjanjabi obwa PAC sigwegumu eri buli mukyala mu Uganda nga kino kiva ku mbeera embi abasawo gyebakoleramu mu awamu n'okutya okusongebwamu ennwe okwekussa kukujjamu olubuto. Endowooza y'abazaalisa nti okujjamu olubuto kibbi, yakontana n'okutendekebwa kwabwe nga abasawo abaliwo okuwa obujjanjabi obulungi. Okuwa omukisa buli musawo okwenyigira mu kuwa abakyala obujjanjabi bwa PAC, kyayongeza obungi bwabaso abawagira eky'okukanya amateeka agaziyiza okujjamu embuto, era kyajawo nendowooza embi ezali zetolodde obujjanji bwa PAC era kyayongera n'okucuusa engeri abasawo gyebalabamu abakyala abajja nga betaaga obujjanjabi buno. Okusongebwamu nnwe okwekuusa kukujjamu olubuto kwalinyo kwabo abakyala ebateberezebwa nti olubuto balujjeemu bujji naye ate tekyakooma nga ku mukyala yeka wabula n'omusawo ateberezebwa omuyambako okulujjamu. Abasawo abazaalisa



abamu berabirako namaaso gabwe empisa embi abakyala abamu gyebayisibwa nga singa baba baze okufuna obujjanjabi bwa PAC oluvanyuma olwa abasawo okubatebereza nti embuto bali bajjeemu zijje.

Nga tutunulidde ekya abasawo abazaalisa okujjajaba abakyala abavuddemu oba abajeemu embuto nga tukozesa misoprostol, ekitabo kino kiziba omuwatwa og'okumanya oguliwo wakati wa abazaalisa ne badokita—ensonga enkulu mukendeza obunji obwa abakyala abaffa mu Uganda. Era, okujjaye mubulambalamba endowooza ezabakyala, ekitabo kino kiwa entegeera enungamu ekwata ku engeri abakyala abato gyebenyigira mukwetusaako obujjanjabi obw'okujjumu embuto, n'okulaga obuyinza bwebalina mukwetusaako obujjanjabi obw'okujjumu embuto nabiki ebibi ebikuvaamu. Nga maliriza, okuzuula endowooza zabasawo, twasobola okulaba omutindo gw'obujjanjabi bwa PAC ne engeri okutya okusongebwamu ennwe ekwekuusa okukujumu olubuto jjekukosaamu obujjanjabi buno. Ebivudde mukunonyereza kuno bisobola okumanyisa n'okuwabula enteka teeka ez'omumaaso ezigereddumu okwongerera okutuusa wamu n'okutumbula omutindo ogw'obujjanjabi bwa PAC, era n'enkola zona eziyinza okuba nti zitumbula wamu n'okukuma empereza awamu n'eddembe eyabakyala abato okwetusaako eby'obulamu ebyekuusa kukuzaala.

## 14 SUMMARY IN SWEDISH

De senaste decennierna har sett anmärkningsvärda globala framsteg i förhållande till sexuell och reproduktiv hälsa och rättigheter (SRHR). Den globala mödradödligheten har minskat, men utvecklingen har varit ojämn. Många länder misslyckades med att uppnå globala mål om en minskning av mödradödligheten med 75% till 2015. Den mer omfattande, hållbara utvecklingsagendan 2030 (Agenda 2030) är lovande då den inkluderar mål som syftar till att säkerställa universell tillgång till SRHR och främjande av jämställdhet mellan kvinnor och män. Framgången för Agenda 2030 beror på nationers engagemang för att minska sociala ojämlikheter och investeringar i kvinnors, ungdomars och barns hälsa och liv. 'Universal Health Coverage' (UCH) är en hörnsten i Agenda 2030 som lovar att alla ska ha tillgång till sjukvård. Det har hävdats att frågor som rör säker abort och postabortvård har förbisett i ansträngningar för att uppnå UHC. Idag saknar fortfarande hundratals miljoner kvinnor förmåga att fatta säkra beslut gällande sin sexuella och reproduktiva hälsa.

Ugandas regering har förbundit sig att ta tillvara sin demografiska potential genom att investera i preventivmedel och utbildning. Ugandas ansträngningar att uppnå globala mål i relation till reproduktiv hälsa har resulterat i ökad tillgång till hälso-sjukvårdspersonal – sjuksköterskor och barnmorskor i synnerhet – kortare avstånd till sjukvårdsinrättningar, ökad preventivmedelsanvändning och minskad mödradödlighet. Den snabba befolkningstillväxten samt bristen på och maldistributionen av hälso-sjukvårdspersonal gör dock att landets resurser har svårt att möta befolkningens behov. Osäker abort är fortsatt ett allvarligt folkhälsoproblem som orsakar oerhört mycket lidande för flickor och kvinnor. Post abortvård innefattar behandling av abortkomplikationer på grund av antingen spontan eller inducerad abort samt preventivmedelsrådgivning. Post abortvård är laglig och tillhandahålls av sjuksköterskor, barnmorskor och läkare i Uganda. Forskning och regeringsrapporter från Uganda indikerar att många kvinnor saknar tillgång till post abortvård och att vårdkvaliteten är undermålig.

Förstärkning av hälsosystemet och ökad tillgång till säker abort och post abortvård av god kvalitet har framförts som prioriterade insatser för kvinnors hälsa. Denna avhandling syftar till att identifiera medel för att förbättra tillgången till och kvaliteten av post abortvård i låg-resurs-kontexter genom 'task sharing' samt genom att utforska unga kvinnors och hälsoarbeters perspektiv i Uganda. Denna avhandling bygger på en multi-center randomiserad kontrollerad ekvivalens-studie samt djupintervjuer med unga kvinnor som söker post abortvård och hälsoarbetare som tillhandahåller post abortvård. Studie I utfördes

på sex sjukvårdsinrättningar i sex olika distrikt i centrala Uganda. Studie II och III genomfördes på ett sjukhus i huvudstaden Kampala.

Studie I syftade till att undersöka säkerheten, effektiviteten och acceptansen av diagnos och behandling av 1:a trimester inkomplett abort med misoprostol av barnmorskor jämfört med läkare. Vi hypotiserade att barnmorskor kan diagnostisera och behandla inkomplett abort med misoprostol lika säkert och effektivt som läkare samt att kvinnors acceptans inte skulle skilja sig mellan studiegrupper (barnmorska jämfört med läkare). Våra resultat visar att diagnos och behandling var lika säker och effektiv när vård tillhandahölls av barnmorskor jämfört med läkare. Vidare fann vi att kvinnans acceptans var hög och associerad med erfarenheter kopplade till behandling och dess utfall och inte med typ av hälso-sjukvårdspersonal.

Studie II syftade till att utforska unga kvinnors reproduktiva agens i förhållande till deras erfarenheter av oavsiktlig graviditet och osäker abort. Vi ville veta hur den sociala miljön formade unga kvinnors reproduktiva agens och handlingar, och under vilka omständigheter abort utfördes och post abortvård söktes. Vi intervjuade kvinnor mellan 15 och 24 år som sökte post abortvård på grund av komplikationer från inducerad aborter. Resultaten avslöjade hur könsnormer och ojämlika maktrelationer skapade sexuell sårbarhet och begränsade unga kvinnors reproduktiva agens. Reproductiv agens och relaterade handlingar skedde inom en makt-asymmetri där kvinnor navigerade mellan könsnormer och förväntningar, hälsorisker, stigma och egna önskemål för framtiden. Kvinnor porträtterade abort som sitt enda och minst önskade alternativ. Samtidigt skildrades abort som en agentisk åtgärd avsedd att återta kontroll. Hemlighållande av aborten faciliterade agens men medförde samtidigt ett risktagande. Ekonomiska hinder samt stigma gjorde att många kvinnor hade svårt att få tillgång till post abortvård. Erfarenheten av abort verkade forma diskurs kring beslutsfattande i förhållande till preventivmedel och intentioner.

Studie III syftade till att undersöka barnmorskors perspektiv på post abortvård. Vi var speciellt intresserade av att öka förståelse kring vårdkvaliteten. Vi intervjuade barnmorskor som arbetade inom post abortvård. Barnmorskor blev ombedda att reflektera över sina erfarenheter av post abortvård från nuvarande och tidigare anställningar på landsbygden och urbana Uganda. Resultaten tyder på att tillgången till post abortvård av god kvalitet är ojämlik i Uganda på grund av dåliga arbetsförhållanden och förekomsten av stigma. Personlig moral i relation till abort var i konflikt med barnmorskans professionell plikt och engagemang för att tillhandahålla post abortvård av god kvalitet. Post abortvård beskrevs som en naturlig del av barnmorskans profession. Erfarenhet av post abortvård verkade öka stöd för att lätta på juridiska restriktioner för abort och sås förebygga missuppfattningar

kring post abortvård och öka hälsoarbetares empati. Abortstigma påverkade vården av kvinnor som misstänktes ha inducerat en abort men hade även konsekvenser för hälsoarbetare inom post abortvård. Några barnmorskor vittnade om respektlös behandling av de unga kvinnor som sökte post abortvård.

Genom att fokusera på 'task sharing' inom post abortvård med hjälp av misoprostol har vi kunnat stänga ett kritiskt kunskapsgap – nödvändigt för att minska mödradödlighet och morbiditet i Uganda. Vidare genom att belysa unga kvinnors perspektiv bidrar denna avhandling till en ökad förståelse kring unga kvinnors reproduktiva agens i Uganda, rådande maktförhållanden samt konsekvenser av agentiskt handlande. Slutligen genom att belysa hälsopersonals perspektiv har vi ökat insikten kring vårdkvalitet inom post abortvård inklusive stigmas roll. Dessa resultat kan informera och guida framtida insatser för att förbättra tillgången till och kvaliteten av post abortvård, samt arbetet för att främja och skydda unga kvinnors SRHR.

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## 16 REFERENCES

1. Starrs AM, Ezeh AC, Barker G, Basu A, Bertrand JT, Blum R, et al. Accelerate progress-sexual and reproductive health and rights for all: report of the Guttmacher-Lancet Commission. *Lancet*. 2018;391(10140):2642–92.
2. United Nations Population Fund (UNFPA) State of the worlds population 2019 – Unfinished business, the persuit of rights and choices for all. New York: *UNFPA*; 2019.
3. Report of the International Conference of Population and Development, Cairo, 5-13 September 1994. Chapter VII, Reproductive rights and human rights, article 7.3. New York: *UN*; 1995.
4. Sippel S. ICPD beyond 2014: Moving beyond missed opportunities and compromises in the fulfilment of sexual and reproductive health and rights. *Glob Public Health*. 2014;9(6):620–30.
5. Petchesky RP. From population control to reproductive rights: feminist fault lines. *Reprod Health Matters*. 1995;Vol. 3(6):152–61.
6. United Nations (UN). Report of the International Conference of Population and Development, Cairo, 5-13 September 1994. Chapter VIII Health, morbidity and mortality, article 8.25. New York: *UN*; 1995.
7. United Nations Committee on Economic Social and Cultural Rights. E/C.12/GC/22. General Comment No. 22 (2016) on the Right to sexual and reproductive health (article 12 of the International Covenant on Economic, Social and Cultural Rights). *UN*; 2016.
8. United Nations (UN). Transforming our world: the 2030 agenda for sustainable development. A/RES/70/1. New York: *UN*; October 2015.
9. Global Strategy for Women’s, Children’s and Adolescent’s Health (2016–2030). New York: *Every Woman Every Child*; 2015.
10. The Partnership for Maternal Newborn and Child Health. Sexual and reproductive health and rights: An essential element to acheiving universal health coverage - A call to action. *PMNCH*; February 2019.
11. Gasman N, Blandon MM, Crane BB. Abortion, social inequity, and women's health: obstetrician-gynecologists as agents of change. *Int J Gynaecol Obstet*. 2006;94(3):310–6.
12. International Women’s Health Coalition. Reality check: Year one impact of Trumps global gag rule. *IWHC*; 2018.
13. Shah IH, Ahman E, Ortayli N. Access to safe abortion: progress and challenges since the 1994 International Conference on Population and Development (ICPD). *Contracept*. 2014;90:39–48.
14. World Health Organization. Trends in maternal mortality 1990 to 2015: estimates by WHO, UNICEF, UNFPA, The World Bank and the United Nations Population Division. Geneva: *WHO*; 2015.
15. Say L, Chou D, Gemmill A, Tunçalp Ö, Moller AB, Daniels J, et al. Global causes of maternal death: a WHO systematic analysis. *Lancet Glob Health*. 2014;2(6):e323–33.
16. Alkema L, Chou D, Hogan D, Zhang S, Moller AB, Gemmill A, et al. Global, regional, and national levels and trends in maternal mortality between 1990 and 2015, with scenario-based projections to 2030: a systematic analysis by the UN Maternal Mortality Estimation Inter-Agency Group. *Lancet*. 2016;387(10017):462–74.
17. Brizuela V, Tunçalp Ö. Global initiatives in maternal and newborn health. *Obstet Med*. 2017;10(1):21–5.
18. Gerdts C, Tunçalp Ö, Johnston H, Ganatra B. Measuring abortion-related mortality: challenges and opportunities. *Reprod Health*. 2015;12:87.



19. World Health Organization. Unsafe abortion incidence and mortality Global and regional estimates of the incidence of unsafe abortion and associated mortality in 2008. 6<sup>th</sup> ed. Geneva: *WHO*; 2011.
20. Kassebaum NJ, Bertozzi-Villa A, Coggeshall MS, Shackelford KA, Steiner C, Heuton KR, et al. Global, regional, and national levels and causes of maternal mortality during 1990–2013: a systematic analysis for the Global Burden of Disease Study 2013. *Lancet*. 2014;13;384(9947):980–1004.
21. Adler AJ, Filippi V, Thomas SL, Ronsmans C. Quantifying the global burden of morbidity due to unsafe abortion: magnitude in hospital-based studies and methodological issues. *Int J Gynaecol Obstet*. 2012;118 Suppl 2:S65–77.
22. Adler AJ, Filippi V, Thomas SL, Ronsmans C. Incidence of severe acute maternal morbidity associated with abortion: a systematic review. *Trop Med Int Health*. 2012;17(2):177–90.
23. Calvert C, Owolabi OO, Yeung F, Pittrof R, Ganatra B, Tunçalp Ö, et al. The magnitude and severity of abortion-related morbidity in settings with limited access to abortion services: a systematic review and meta-regression. *BMJ Glob Health*. 2018;3(3):e000692.
24. Singh S, Maddow-Zimet I. Facility-based treatment for medical complications resulting from unsafe pregnancy termination in the developing world, 2012: a review of evidence from 26 countries. *BJOG*. 2016;123(9):1489–98.
25. Singh S. Global consequences of unsafe abortion. Women's health (Lond). 2010;6(6):849–60.
26. Grimes DA, Singh S, Romero M, Ganatra B, Okonofua FE, Iqbal IH. Unsafe abortion: The preventable pandemic. *Lancet*. 2006;368:1908–19.
27. Bearak J, Popinchalk A, Alkema L, Sedgh G. Global, regional, and subregional trends in unintended pregnancy and its outcomes from 1990 to 2014: estimates from a Bayesian hierarchical model. *Lancet Glob Health*. 2018;6(4):e380–e9.
28. Sedgh G, Bearak J, Singh S, Bankole A, Popinchalk A, Ganatra B, et al. Abortion incidence between 1990 and 2014: global, regional, and subregional levels and trends. *Lancet*. 2016; 388(10041):258–67.
29. Singh S, Remez L, Sedgh G, Kwok L, Onda T. Abortion worldwide 2017. Uneven progress and unequal access. New York: *Guttmacher Institute*; 2018.
30. World Health Organization. Safe Abortion: Technical and Policy Guidance for Health Systems. Geneva: *WHO*; 2012. Report No: 9789241548434.
31. Ganatra B, Tunçalp Ö, Johnston HB, Johnson BR Jr, Gulmezoglu AM, Temmerman M. From concept to measurement: operationalizing WHO's definition of unsafe abortion. *Bull World Health Org*. 2014;92(3):155.
32. Ganatra B, Gerdts C, Rossier C, Johnson BR, Jr, Tunçalp Ö, Assifi A, et al. Global, regional, and subregional classification of abortions by safety, 2010–14: estimates from a Bayesian hierarchical model. *Lancet*. 2017;390(10110):2372–81.
33. Gemzell Danielsson K, Cleeve A. Estimating abortion safety: advancements and challenges. *Lancet*. 2017;390(10110):2333–4.
34. Sedgh G, Filippi V, Owolabi OO, Singh SD, Askew I, Bankole A, et al. Insights from an expert group meeting on the definition and measurement of unsafe abortion. *Int J Gynaecol Obstet*. 2016;134(1):104–6.
35. Jonas K, Crutzen R, van den Borne B, Reddy P. Healthcare workers' behaviors and personal determinants associated with providing adequate sexual and reproductive healthcare services in sub-Saharan Africa: a systematic review. *BMC Pregnancy Childbirth*. 2017;17(1):86.

36. Braam T, Hessini L. The power dynamics perpetuating unsafe abortion in Africa: a feminist perspective. *Afr J Reprod Health*. 2004;8(1):43–51.
37. Kumar A, Hessini L, Mitchell EM. Conceptualising abortion stigma. *Cult Health Sex*. 2009;11(6):625–39.
38. Shellenberg KM, Moore AM, Bankole A, Juarez F, Omidoyi AK, Palomino N, et al. Social stigma and disclosure about induced abortion: results from an exploratory study. *Glob Public Health*. 2011;6 Suppl 1:S111–25.
39. Chandra-Mouli V, Svanemyr J, Amin A, Fogstad H, Say L, Girard F, et al. Twenty years after International Conference on Population and Development: where are we with adolescent sexual and reproductive health and rights? *J Adolesc H*. 2015;56(1 Suppl):S1–6.
40. Shah IH, Ahman E. Unsafe abortion differentials in 2008 by age and developing country region: high burden among young women. *Reprod Health Matters*. 2012;20(39):169–73.
41. Goffman E. Chapter 1, Stigma and social identity. In: Stigma: Notes on the management of spoiled identity; New Jersey, USA: *Penguin Books*; 1963. p.11–55.
42. Link BG, Phelan JC. Conceptualising Stigma. *Annu Rev Soc*. 2001;27:363–85.
43. Link BG, Struening EL, Rahav M, Phelan JC, Nuttbrock L. On stigma and its consequences: evidence from a longitudinal study of men with dual diagnoses of mental illness and substance abuse. *J Health Soc Behav*. 1997;38(2):177–90.
44. Petchesky RP. Introduction: Beyond “A Woman's Right to Choose – Feminist Ideas about Reproductive Rights. In: Abortion and woman's choice: the state, sexuality and reproductive freedom; Boston: *Northeastern University Press*; 1985. p.1–21
45. LeTourneau K. Abortion stigma around the world: A synthesis of the qualitative literature. A technical report for members of The International Network for the Reduction of Abortion Discrimination and Stigma (Inroads). Chapel Hill, NC: *Inroads*; 2016.
46. Huber D, Curtis C, Irani L, Pappa S, Arrington L. Postabortion Care: 20 Years of Strong Evidence on Emergency Treatment, Family Planning, and Other Programming Components. *Glob Health Sci Pract*. 2016;4(3):481–94.
47. Rasch V. Unsafe abortion and postabortion care - an overview. *Acta Obstet Gynecol Scandi*. 2011;90(7):692–700.
48. Corbett MR, Turner KL. Essential elements of postabortion care: origins, evolution and future directions. *Int Family Plan Perspect*. 2003;29(3):106–11.
49. Temmerman M, Khosla R, Laski L, Mathews Z, Say L, Women, et al. Women's health priorities and interventions. *Bmj*. 2015;351:h4147.
50. Cobb L, Putney P, Rochat R, Solo J, Buono N, Dunlop J, Vandenbroucke M. Global evaluation of USAID's postabortion care program. Washington DC: *The United States Agency for International Development (USAID)*; 2001.
51. Owolabi OO, Biddlecom A, Whitehead HS. Health systems' capacity to provide post-abortion care: a multicountry analysis using signal functions. *Lancet Glob Health*. 2019;7(1):e110–e8.
52. Curtis C. Meeting health care needs of women experiencing complications of miscarriage and unsafe abortion: USAID's postabortion care program. *J Midwifery Womens Health*. 2007;52(4):368–75.
53. Gemzell Danielsson K, Fiala C, Weeks A. Misoprostol: first-line therapy for incomplete miscarriage in the developing world. *BJOG*. 2007;114(11):1337–9.
54. Weeks A, Alia G, Blum J, Winikoff B, Ekwuru P, Durocher J, et al. A randomized trial of misoprostol compared with manual vacuum aspiration for incomplete abortion. *Obstetrics and Gynecology*. 2005;106(3):540–7.

55. Tang J, Kapp N, Dragoman M, de Souza JP. WHO recommendations for misoprostol use for obstetric and gynecologic indications. *Int J Gynaecol Obstet*. 2013;121(2):186–9.
56. World Health Organization. WHO Model List of Essential Medicines. 20th ed. Geneva: WHO; 2017.
57. Shochet T, Diop A, Gaye A, Nayama M, Sall AB, Bukola F, et al. Sublingual misoprostol versus standard surgical care for treatment of incomplete abortion in five sub-Saharan African countries. *BMC Pregnancy Childbirth*. 2012;12:127.
58. Yarnall J, Swica Y, Winikoff B. Non-physician clinicians can safely provide first trimester medical abortion. *Reprod Health Matters*. 2009;17(33):61–9.
59. Campbell J DG, Buchan J, Pozo-Martin F, Guerra Arias M, Leone C, Siyam A, Cometto G. A universal truth: no health without a workforce. Forum Report, Third Global Forum on Human Resources for Health, Recife, Brazil. Geneva: *Global Health Workforce Alliance and WHO*; 2013.
60. Campbell J, Buchan J, Cometto G, David B, Dussault G, Fogstad H, et al. Human resources for health and universal health coverage: fostering equity and effective coverage. *Bull World Health Org*. 2013;91(11):853–63.
61. World Health Organization. The world health report 2006: working together for health. Geneva: WHO; 2006.
62. World Health Organization. Global strategy on human resources for health: workforce 2030. Geneva: WHO; 2016.
63. Renfrew MJ, McFadden A, Bastos MH, Campbell J, Channon AA, Cheung NF, et al. Midwifery and quality care: findings from a new evidence-informed framework for maternal and newborn care. *Lancet*. 2014;20;384(9948):1129–45.
64. United Nations Population Fund. State of the World's Midwifery 2014: A Universal Pathway. A Woman's Right to Health. New York. UNFPA; 2014.
65. ten Hoope-Bender P, de Bernis L, Campbell J, Downe S, Fauveau V, Fogstad H, et al. Improvement of maternal and newborn health through midwifery. *Lancet*. 2014;384(9949):1226–35.
66. Homer CS, Friberg IK, Dias MA, Ten Hoope-Bender P, Sandall J, Speciale AM, et al. The projected effect of scaling up midwifery. *Lancet*. 2014;20;384(9948):1146–57.
67. Levi A, Angel James E, Taylor D. Midwives and abortion care: a model for achieving competency. *J Midwifery Womens Health*. 2012;57(3):285–9.
68. International Confederation of Midwives. ICM: Midwives' Provision of Abortion-related Services. The Hague, ICM; 2008.
69. Berer M. Provision of abortion by mid-level providers: international policy, practice and perspectives. *Bull World Health Org*. 2009;87(1):58–63.
70. Kopp Kallner H, Gomperts R, Salomonsson E, Johansson M, Marions L, Gemzell Danielsson K. The efficacy, safety and acceptability of medical termination of pregnancy provided by standard care by doctors or by nurse-midwives: a randomised controlled equivalence trial. *BJOG*. 2014;122(4):510–7.
71. Warriner IK, Meirik O, Hoffman M, Morroni C, Harries J, My Huong NT, et al. Rates of complication in first-trimester manual vacuum aspiration abortion done by doctors and mid-level providers in South Africa and Vietnam: a randomised controlled equivalence trial. *Lancet*. 2006;368(9551):1965–72.
72. Warriner IK, Wang D, Huong NT, Thapa K, Tamang A, Shah I, et al. Can midlevel health-care providers administer early medical abortion as safely and effectively as doctors? A randomised controlled equivalence trial in Nepal. *Lancet*. 2011;377(9772):1155–61.

73. Fawole AO, Diop A, Adeyanju AO, Aremu OT, Winikoff B. Misoprostol as first-line treatment for incomplete abortion at a secondary-level health facility in Nigeria. *Int J Gynaecol Obstet*. 2012;119(2):170–3.
74. Gessesew A, Barnabas GA, Prata N, Weidert K. Task shifting and sharing in Tigray, Ethiopia, to achieve comprehensive emergency obstetric care. *Int J Gynaecol Obstet*. 2011;113(1):28–31.
75. Gaye A, Diop A, Shochet T, Winikoff B. Decentralizing postabortion care in Senegal with misoprostol for incomplete abortion. *Int J Gynaecol Obstet*. 2014;126(3):223–6.
76. World Health Organization. The World Health Report: Working together for health. Geneva: WHO; 2006.
77. Lehmann U, Van Damme W, Barten F, Sanders D. Task shifting: the answer to the human resources crisis in Africa? *Hum Resour Health*. 2009;7:49.
78. Anyangwe SC, Mtonga C. Inequities in the global health workforce: the greatest impediment to health in sub-Saharan Africa. *Int J Environ Res Public Health*. 2007;4(2):93–100.
79. Kruk ME, Pereira C, Vaz F, Bergstrom S, Galea S. Economic evaluation of surgically trained assistant medical officers in performing major obstetric surgery in Mozambique. *BJOG*. 2007;114(10):1253–60.
80. Pereira C, Mbaruku G, Nzabuhakwa C, Bergstrom S, McCord C. Emergency obstetric surgery by non-physician clinicians in Tanzania. *Int J Gynaecol Obstet*. 2011;114(2):180–3.
81. World Health Organization. Task shifting: rational redistribution of tasks among health workforce teams: global recommendations and guidelines. Geneva: WHO; 2008.
82. Dawson AJ, Buchan J, Duffield C, Homer CS, Wijewardena K. Task shifting and sharing in maternal and reproductive health in low-income countries: a narrative synthesis of current evidence. *Health Policy Plan*. 2014;29(3):396–408.
83. Nelson R. Combating global health worker shortages: task shifting and sharing may provide one solution. *Am J Nurs*. 2012;112(12):17–8.
84. Uganda Ministry of Finance, Planning and Economic Development. State of Uganda population Report 2016. Quality healthcare: key for sustainable development. Kampala, Uganda: *Ministry of Finance, Planning and Economic Development*; 2016.
85. World Bank Open Data. Country Profile: Uganda [Internet]. *World Bank*. [cited March 4th, 2019]. Available from: [https://databank.worldbank.org/data/views/reports/reportwidget.aspx?Report\\_Name=CountryProfile&Id=b450fd57&tbar=y&dd=y&inf=n&zm=n&country=UGA](https://databank.worldbank.org/data/views/reports/reportwidget.aspx?Report_Name=CountryProfile&Id=b450fd57&tbar=y&dd=y&inf=n&zm=n&country=UGA)
86. Uganda Bureau of Statistics. Uganda Demographic and Health Survey. Kampala, Uganda: *UBOS*; 2011.
87. Prada E, Atuyambe LM, Blades NM, Bukenya JN, Orach CG, Bankole A. Incidence of Induced Abortion in Uganda, 2013: New Estimates Since 2003. *PloS One*. 2016;11(11):e0165812.
88. Uganda Bureau of Statistics. The National Population and Housing Census 2014 – Main Report. Kampala, Uganda: *UBOS*; 2016.
89. Uganda Ministry of Health. Mid-term review report for the health sector development plan 2015/16 - 2019/20. Kampala, Uganda: *Ministry of Health*; 2018.
90. Uganda Ministry of Health. Health sector strategic & investment plan: Promoting People’s Health to Enhance Socio-economic Development 2010/11–2014/15. Kampala, Uganda: *Ministry of Health*; 2010.
91. Uganda Ministry of Health. Investment case: Reproductive, Maternal, Newborn, Child and Adolescent Health Sharpened Plan for Uganda 2016/17–2019/20. Kampala, Uganda: *Ministry of Health*; 2016.

92. Nabudere H, Asiimwe D, Mijumbi R. Task shifting in maternal and child health care: an evidence brief for Uganda. *Int J Tech Assess Health Care*. 2011;27(2):173–9.
93. Uganda Ministry of Health. Human resources for health: Audit report. Kampala, Uganda: *Ministry of Health*; 2017.
94. Uganda Ministry of Health. MoH Health sector quality improvement framework and strategic plan 2015/15–2019/20. Kampala, Uganda: *Ministry of Health*; 2016.
95. Uganda Ministry of Health. Health Sector Development Plan (HSDP) 2015/16 to 2019/20. Kampala, Uganda: Ministry of Health; 2015.
96. Uganda Bureau of Statistics. Uganda Demographic and Health Survey 2016: Key Indicators Report. Kampala, Uganda: *UBOS*; 2017.
97. Moore AM, Jagwe-Wadda G, Bankole A. Mens’ attitudes about abortion in Uganda. *J Biosoc Sci*. 2011;43(1):31–45.
98. Center for Reproductive Rights. Briefing paper: A Technical Guide to Understanding the Legal and Policy Framework on Termination of Pregnancy in Uganda. New York: *CRR*; 2012.
99. Mulumba M, Kiggundu C, Nassimbwa J, Nakibuuka NM. Access to safe abortion in Uganda: Leveraging opportunities through the harm reduction model. *Int J Gynaecol Obstet*. 2017;138(2):231–6.
100. Uganda Ministry of Health. The National Policy Guidelines and Service Standards for Sexual and Reproductive Health and Rights Kampala Uganda: *Ministry of Health, Reproductive Health Division*; 2006.
101. Moore AM, Kibombo R, Cats-Baril D. Ugandan opinion-leaders’ knowledge and perceptions of unsafe abortion. *Health Policy Plan*. 2013.
102. Protocol to the African Charter on Human and Peoples’ Rights on the Rights of Women in Africa, adopted July 11, 2003, 2nd African Union Assembly, Maputo, Mozambique (ratified July 22, 2010).
103. Uganda Ministry of Health. Maternal and perinatal death review Uganda 2012/13. Kampala, Uganda: *National MDPR Committee*; 2014.
104. Sundaram A, Vlassoff M, Mugisha F, Bankole A, Singh S, Amany L, et al. Documenting the individual- and household-level cost of unsafe abortion in Uganda. *Int Perspect Sex Reprod Health*. 2013;39(4):174–84.
105. Vlassoff M, Mugisha F, Sundaram A, Bankole A, Singh S, Amany L, et al. The health system cost of post-abortion care in Uganda. *Health Policy Plan*. 2012;29(1):56–66.
106. Uganda Ministry of Health. Reducing morbidity and mortality from unsafe abortion in Uganda: Standards and guidelines. Kampala, Uganda: Ministry of Health; 2015.
107. Cleeve A, Oguttu M, Ganatra B, Atuhairwe S, Larsson EC, Makenzius M, et al. Time to act - Comprehensive abortion care in East Africa. *Lancet Glob Health*. 2016;4(9):e601–2.
108. Atukunda EC, Brhlikova P, Agaba AG, Pollock AM. Civil Society Organizations and medicines policy change: a case study of registration, procurement, distribution and use of misoprostol in Uganda. *Soc Sci Med (1982)*. 2015;130:242–9.
109. Samnani A, Rizvi N, Ali TS, Abrejo F. Barriers or gaps in implementation of misoprostol use for post-abortion care and post-partum hemorrhage prevention in developing countries: a systematic review. *Reprod Health*. 2017;14(1):139.
110. Osur J, Baird TL, Levandowski BA, Jackson E, Murokora D. Implementation of misoprostol for postabortion care in Kenya and Uganda: a qualitative evaluation. *Glob Health Action*. 2013;6:1–11.

111. Prada E. MF, Ahmed MH, Nalwadda R, Kiggundu C. Abortion and Postabortion Care In Uganda: A Report from Health Care Professionals and Health Facilities. New York: *Guttmacher Institute*; 2005 (No. 17).
112. Paul M, Gemzell Danielsson K, Kiggundu C, Namugenyi R, Klingberg-Allvin M. Barriers and facilitators in the provision of post-abortion care at district level in central Uganda - a qualitative study focusing on task sharing between physicians and midwives. *BMC Health Serv Res*. 2014;14:28.
113. Mellerup N, Sorensen BL, Kuriigamba GK, Rudnicki M. Management of abortion complications at a rural hospital in Uganda: a quality assessment by a partially completed criterion-based audit. *BMC Women's Health*. 2015;15:76.
114. Uganda Ministry of Health. Uganda Hospital and Health Centre IV Census Survey 2014. Kampala, Uganda: *Ministry of Health*; 2014.
115. Kananura RM, Kiwanuka SN, Ekirapa-Kiracho E, Waiswa P. Persisting demand and supply gap for maternal and newborn care in eastern Uganda: a mixed-method cross-sectional study. *Reprod Health*. 2017;14(1):136.
116. Jagwe-Wadda G. MA, Woog V. Abortion Morbidity in Uganda: Evidence from Two Communities. New York: *Guttmacher Institute*; 2006 (No. 26).
117. Connell R, Pearse R, eds. Chapter 1, The question of gender. In: Gender in a world perspective. 3:ed ed. Cambridge UK: *Polity Press*; 2015. p.1–12.
118. Connell R. Gender, health and theory: conceptualizing the issue, in local and world perspective. *Soc Sci Med (1982)*. 2012;74(11):1675–83.
119. Morgan R, Tetui M, Muhumuza Kananura R, Ekirapa-Kiracho E, George AS. Gender dynamics affecting maternal health and health care access and use in Uganda. *Health Policy Plan*. 2017;32(suppl\_5):v13–v21.
120. Nyanzi S, Pool R, Kinsman J. The negotiation of sexual relationships among school pupils in south-western Uganda. *AIDS care*. 2001;13(1):83–98.
121. Råssjö EB, Kiwanuka R. Views on social and cultural influence on sexuality and sexual health in groups of Ugandan adolescents. *Sex Reprod Healthc*. 2010;1(4):157–62.
122. Atuyambe L, Mirembe F, Johansson A, Kirumira EK, Faxelid E. Experiences of pregnant adolescents--voices from Wakiso district, Uganda. *Afr Health Sci*. 2005;5(4):304–9.
123. Kaye DK, Mirembe FM, Bantebya G, Johansson A, Ekstrom AM. Domestic violence as risk factor for unwanted pregnancy and induced abortion in Mulago Hospital, Kampala, Uganda. *Trop Med Int Health*. 2006;11(1):90–101.
124. Larsson S, Eliasson M, Klingberg Allvin M, Faxelid E, Atuyambe L, Fritzell S. The discourses on induced abortion in Ugandan daily newspapers: a discourse analysis. *Reprod Health*. 2015;12:58.
125. Nyanzi S, Nyanzi B, Bessie K. "Abortion? That's for women!" Narratives and experiences of commercial motorbike riders in south-western Uganda. *Afr J Reprod Health*. 2005;9(1):142–61.
126. Wyrod R. Between Women's Rights and Men's Authority: Masculinity and Shifting Discourses of Gender Difference in Urban Uganda. *Gend Soc*. 2008;22(6):799–823.
127. Government of Uganda. Second National Development Plan (NDP II) 2015/16-2019/20. Kampala, Uganda: *National Planning Authority*; 2015.
128. United Nations Development Programme. UNDP Uganda gender equality strategy 2014-2017. *UNDP*; 2014.
129. Obrist B, Iteba N, Lengeler C, Makemba A, Mshana C, Nathan R, et al. Access to health care in contexts of livelihood insecurity: a framework for analysis and action. *PLoS Med*. 2007;4(10):1584–8.

130. Tunçalp Ö, Were WM, MacLennan C, Oladapo OT, Gulmezoglu AM, Bahl R, et al. Quality of care for pregnant women and newborns-the WHO vision. *BJOG*. 2015;122(8):1045–9.
131. Levesque JF, Harris MF, Russell G. Patient-centred access to health care: conceptualising access at the interface of health systems and populations. *Int J Equity Health*. 2013;12:18.
132. Renner RM, Brahmi D, Kapp N. Who can provide effective and safe termination of pregnancy care? A systematic review\*. *BJOG*. 2013;120(1):23–31.
133. Blum J, Winikoff B, Gemzell Danielsson K, Ho PC, Schiavon R, Weeks A. Treatment of incomplete abortion and miscarriage with misoprostol. *Int J Gynaecol Obstet*. 2007;99 Suppl 2:S186–9.
134. Uganda Bureau of Statistics. Administrative units by districts in Uganda. UBOS; 2018. [cited April 10th, 2019]. [Available from: <https://www.ubos.org/explore-statistics/statistical-datasets/1222059/>].
135. Ortner SB. Chapter 6, Power and Projects. In: Anthropology and social theory: culture, power and the acting subject. Durham, USA: *Duke University Press*; 2006. p.129–153.
136. Cleeve A, Faxelid E, Nalwadda G, Klingberg-Allvin M. Abortion as agentive action: reproductive agency among young women seeking post-abortion care in Uganda. *Cult Health Sex*. 2017;19(11):1286–300.
137. Braun V, Clarke V. Using thematic analysis in psychology. *Qualitative Research in Psychology*. 2006;3(2):77–101.
138. Braun V, Clarke V. What can "thematic analysis" offer health and wellbeing researchers? *Int J Qual Stud Health Well-being*. 2014;9:26152.
139. Cleeve A, Byamugisha J, Gemzell Danielsson K, Mbona Tumwesigye N, Atuhairwe S, Faxelid E, et al. Women's Acceptability of Misoprostol Treatment for Incomplete Abortion by Midwives and Physicians - Secondary Outcome Analysis from a Randomized Controlled Equivalence Trial at District Level in Uganda. *PloS One*. 2016;11(2):e0149172.
140. Klingberg-Allvin M, Cleeve A, Atuhairwe S, Tumwesigye NM, Faxelid E, Byamugisha J, et al. Comparison of treatment of incomplete abortion with misoprostol by physicians and midwives at district level in Uganda: a randomised controlled equivalence trial. *Lancet*. 2015;385:2393–8.
141. World Health Organization. Health worker roles in providing safe abortion care and post abortion contraception. Geneva: *WHO*; 2015.
142. Makenzius M, Oguttu M, Klingberg-Allvin M, Gemzell Danielsson K, Odero TMA, Faxelid E. Post-abortion care with misoprostol - equally effective, safe and accepted when administered by midwives compared to physicians: a randomised controlled equivalence trial in a low-resource setting in Kenya. *BMJ Open*. 2017;7(10):e016157.
143. Ganatra B. Health worker roles in safe abortion care and post-abortion contraception. *Lancet Glob Health*. 2015;3(9):e512–3.
144. Ipas. Expanding roles of providers in safe abortion care: a programmatic approach to meeting women's needs. Chapel Hill, NC: *Ipas*; 2016.
145. Campbell J, Sochas L, Cometto G, Matthews Z. Evidence for action on improving the maternal and newborn health workforce: The basis for quality care. *Int J Gynaecol Obstet*. 2016;132(1):126–9.
146. Campbell J. Towards universal health coverage: a health workforce fit for purpose and practice. *Bull World Health Organ*. 2013;91(11):887–8.
147. Cometto G, Witter S. Tackling health workforce challenges to universal health coverage: setting targets and measuring progress. *Bull World Health Organ*. 2013;91(11):881–5.

148. Clevee A, Nalwadda G, Zadik T, Sterner T, Klingberg-Allvin M. Morality versus duty - A qualitative study exploring midwives' perspectives on post abortion care provision in Uganda. 2019. *Manuscript under review*.
149. Bohren MA, Vogel JP, Hunter EC, Lutsiv O, Makh SK, Souza JP, et al. The Mistreatment of Women during Childbirth in Health Facilities Globally: A Mixed-Methods Systematic Review. *PLoS Med*. 2015;12(6):e1001847.
150. Bacon A. EC, Rostoker J-F, Apoko Olaro A,. Exploring the Role of Midwives in Uganda's Postabortion Care: Current Practice, Barriers, and Solutions. *Int J Childbirth*. 2014;4(1).
151. Glenton C, Sorhaindo AM, Ganatra B, Lewin S. Implementation considerations when expanding health worker roles to include safe abortion care: a five-country case study synthesis. *BMC Public Health*. 2017;17(1):730.
152. Cometto G, Tulenko K, Muula AS, Krech R. Health workforce brain drain: from denouncing the challenge to solving the problem. *PLoS Med*. 2013;10(9):e1001514.
153. Uganda Ministry of Health. The first Uganda national nursing and midwifery policy. Kampala, Uganda: *Ministry of Health*; 2016. *Draft*.
154. World Health Organization. Midwives voices, midwives realities. Findings from a global consultation on providing quality midwifery care. Geneva: *WHO*; 2016.
155. Taylor D, Postlethwaite D, Desai S, James EA, Calhoun AW, Sheehan K, et al. Multiple determinants of the abortion care experience: from the patient's perspective. *Am J Med Qual*. 2013;28(6):510–8.
156. Altshuler AL, Ojanen-Goldsmith A, Blumenthal PD, Freedman LR. A good abortion experience: A qualitative exploration of women's needs and preferences in clinical care. *Soc Sci Med (1982)*. 2017;191:109–16.
157. Altshuler AL, Whaley NS. The patient perspective: perceptions of the quality of the abortion experience. *Curr Opin Obstet Gynecol*. 2018;30(6):407–13.
158. Aniteye P, Mayhew SH. Shaping legal abortion provision in Ghana: using policy theory to understand provider-related obstacles to policy implementation. *Health Res Policy Syst*. 2013;11:23.
159. Harries J, Stinson K, Orner P. Health care providers' attitudes towards termination of pregnancy: a qualitative study in South Africa. *BMC Public Health*. 2009;9:296.
160. Andersson IM, Gemzell Danielsson K, Christensson K. Caring for women undergoing second-trimester medical termination of pregnancy. *Contracept*. 2014;89(5):460–5.
161. Ishola F, Owolabi O, Filippi V. Disrespect and abuse of women during childbirth in Nigeria: A systematic review. *PloS One*. 2017;12(3):e0174084.
162. Turner KL, Pearson E, George A, Andersen KL. Values clarification workshops to improve abortion knowledge, attitudes and intentions: a pre-post assessment in 12 countries. *Reprod Health*. 2018;15(1):40.
163. Center for Health Human Rights and Development, Center for Reproductive Rights. Facing Uganda's law on abortion: Experiences fromn women and service providers. Kampala, Uganda: *CEHURD*; 2010.
164. Center for Reproductive Rights. In harms way - the impact of Kenya's restrictive abortion law. New York: *CRR*; 2010.
165. Aniteye P, O'Brien B, Mayhew SH. Stigmatized by association: challenges for abortion service providers in Ghana. *BMC Health Serv Res*. 2016;16:486.
166. Penfold S, Wendot S, Nafula I, Footman K. A qualitative study of safe abortion and post-abortion family planning service experiences of women attending private facilities in Kenya. *Reprod Health*. 2018;15(1):70.
167. Paul M, Nasstrom SB, Klingberg-Allvin M, Kiggundu C, Larsson EC. Healthcare providers balancing norms and practice: challenges and opportunities in



- providing contraceptive counselling to young people in Uganda - a qualitative study. *Glob Health Action*. 2016;9:30283.
168. Kakaire O NJ, Lule JC, Byamugisha JK. Post Abortion Women's Perceptions of Utilizing Long Acting Reversible Contraceptive Methods in Uganda. A Qualitative Study. *Open J Obstet Gynecol* 2014;4:1087–97.
  169. Evens E, Otieno-Masaba R, Eichleay M, McCarraher D, Hainsworth G, Lane C, et al. Post-abortion care services for youth and adult clients in Kenya: a comparison of services, client satisfaction and provider attitudes. *J Biosoc Sci*. 2014;46(1):1–15.
  170. Kaye DK. Community perceptions and experiences of domestic violence and induced abortion in Wakiso district, Uganda. *Qual Health Res*. 2006;16(8):1120–8.
  171. Ninsiima AB, Leye E, Michielsen K, Kemigisha E, Nyakato VN, Coene G. "Girls Have More Challenges; They Need to Be Locked Up": A Qualitative Study of Gender Norms and the Sexuality of Young Adolescents in Uganda. *Int J Environ Res Public Health*. 2018;15(2).
  172. Muhanguzi FK. Gender and sexual vulnerability of young women in Africa: experiences of young girls in secondary schools in Uganda. *Cult Health Sex*. 2011;13(6):713–25.
  173. Sully EA, Atuyambe L, Bukonya J, Whitehead HS, Blades N, Bankole A. Estimating abortion incidence among adolescents and differences in postabortion care by age: a cross-sectional study of postabortion care patients in Uganda. *Contracept*. 2018;98(6):510–6.
  174. Gemzell Danielsson K, Kopp Kallner H, Faundes A. Contraception following abortion and the treatment of incomplete abortion. *Int J gynaecol obstet*. 2014;126 Suppl 1:S52–5.
  175. Ruiter RA, Kessels LT, Peters GJ, Kok G. Sixty years of fear appeal research: current state of the evidence. *Int J Psychol*. 2014;49(2):63–70.
  176. Izugbara CO, Egesa CP, Kabiru CW, Sidze EM. Providers, Unmarried Young Women, and Post-Abortion Care in Kenya. *Stud Fam Plann*. 2017;48(4):343–58.
  177. Chiweshe M, Macleod C. 'If You Choose to Abort, You Have Acted As an Instrument of Satan': Zimbabwean Health Service Providers' Negative Constructions of Women Presenting for Post Abortion Care. *Int J Behav Med*. 2017;24(6):856–63.
  178. Nzioka C. Perspectives of adolescent boys on the risks of unwanted pregnancy and sexually transmitted infections: Kenya. *Reprod Health Matters*. 2001;9(17):108–17.
  179. Yu C, Zuo X, Blum RW, Tolman DL, Kagesten A, Mmari K, et al. Marching to a Different Drummer: A Cross-Cultural Comparison of Young Adolescents Who Challenge Gender Norms. *J Adolesc Health*. 2017;61(4S):S48–S54.
  180. Basu S, Zuo X, Lou C, Acharya R, Lundgren R. Learning to Be Gendered: Gender Socialization in Early Adolescence Among Urban Poor in Delhi, India, and Shanghai, China. *J Adolesc Health*. 2017;61(4S):S24–S9.
  181. De Meyer S, Kagesten A, Mmari K, McEachran J, Chilet-Rosell E, Kabiru CW, et al. "Boys Should Have the Courage to Ask a Girl Out": Gender Norms in Early Adolescent Romantic Relationships. *J Adolesc Health*. 2017;61(4S):S42–S7.
  182. Goicolea I, STM, Edin K, Öhman A. When Sex is Hardly About Mutual Pleasure: Dominant and Resistant Discourses on Sexuality and its Consequences for Young People's Sexual Health. *Int J Sex Health*. 2012;24(4):303–17.
  183. Lundgren R, Burgess S, Chantelois H, Oregede S, Kerner B, Kagesten AE. Processing gender: lived experiences of reproducing and transforming gender norms over the life course of young people in Northern Uganda. *Cul Health Sex*. 2019;21(4):387–403.
  184. Mohamed D, Diamond-Smith N, Njunguru J. Stigma and agency: exploring young Kenyan women's experiences with abortion stigma and individual agency. *Reprod Health Matters*. 2018;26(52):1492285.

185. Hankivsky O. RC, Cormier R, Varcoe C, Clark N, Benoit C, Brotman S. Exploring the promises of intersectionality for advancing women's health research. *Int J Equity Health*. 2010;9(5).
186. Collins PY, von Unger H, Armbrister A. Church ladies, good girls, and locas: stigma and the intersection of gender, ethnicity, mental illness, and sexuality in relation to HIV risk. *Soc Sci Med* (1982). 2008;67(3):389–97.
187. Lovell N. Life experiences and expectations of young women in Uganda. *J Health Organ Manag*. 2010;24(5):505–11.
188. Kaye DK, Mirembe F, Bantebya G, Johansson A, Ekstrom AM. Reasons, methods used and decision-making for pregnancy termination among adolescents and older women in Mulago Hospital, Uganda. *East Afr Med J*. 2005;82(11):579–85.
189. United Nations Population Fund. *Girlhood, Not Motherhood: Preventing Adolescents Pregnancy*. New York: UNFPA; 2015.
190. Ministry of Finance, Planning and Economic Development. *Harnessing the demographic dividend: accelerating socioeconomic transformation in Uganda*. Kampala, Uganda: National Planning Authority; 2014.
191. Edmeades J, Meija C, Parsons J, Sebany M. A conceptual framework for reproductive empowerment: Empowering individuals and couples to improve their health (Background paper). Washington D.C: International Center for Research on Women (ICRW); 2018.
192. Kowalski S. Universal health coverage may not be enough to ensure universal access to sexual and reproductive health beyond 2014. *Glob Public Health*. 2014;9(6):661–8.
193. Sen G, Govender V. Sexual and reproductive health and rights in changing health systems. *Glob Public Health*. 2015;10(2):228–42.
194. Assembly of the African Union. Thirty Second Ordinary Session 10–11 February 2019, Addis Ababa, Ethiopia. Decisions, declarations, Resolutions and motions. Declaration of the Africa leadership meeting – investing in health “Addis Ababa commitments towards shared responsibility and global solidarity for increased health financing”. Doc. Assembly/AU/Decl.4(XXXII). *African Union*; 2019.
195. Human Rights Council. Report on the Activities of the Office of the United Nations High Commissioner for Human Rights and the Human Rights Situation in Uganda. Kampala Uganda: OHCHR; 2011.
196. Zikusooka CM KB, Lagony S, Abewe C,. Universal Health Coverage Assessment Uganda. *Global Network for Health Equity (GNHE)*; 2014.
197. Center for Reproductive Rights, Center for Health Human Rights and Development. Universal Periodic Review of Uganda - Report on Uganda's Compliance with its Human Rights Obligations in the Area of Women's Reproductive and Sexual Health. Kampala Uganda: CRR, CEHURD; 2016.
198. Onarheim KH, Iversen JH, Bloom DE. Economic Benefits of Investing in Women's Health: A Systematic Review. *PloS One*. 2016;11(3):e0150120.
199. Gordis L. Chapter 8, Randomized trials: Some Further Issues. In: *Epidemiology, Elsevier*; 2013. p.155–176.
200. Wiens BL. Choosing an equivalence limit for noninferiority or equivalence studies. *Control Clin Trials*. 2002;23(1):2–14.
201. Christensen E. Methodology of superiority vs. equivalence trials and non-inferiority trials. *J Hepatol*. 2007;46(5):947–54.
202. European Medicines Agency. ICH Topic E9, Statistical principles for clinical trials. CPMP/ICH/363/96. United Kindom: EMEA; 1998.
203. Sheng D, Kim MY. The effects of non-compliance on intention-to treat analysis of equivalence trials. *Statist. Med*. 2006; 25:1183–1199.

204. Shenton AK. Strategies for ensuring trustworthiness in qualitative research projects. *Education for Information*. 2004;22:63–75.
205. Råheim M, Magnussen LH, Sekse RJ, Lunde A, Jacobsen T, Blystad A. Researcher-researched relationship in qualitative research: Shifts in positions and researcher vulnerability. *Int J Qual Stud Health Well-being*. 2016;11:30996.

## **17 APPENDICES**

Appendix I: Study protocol, Study I (Papers I and II)

Appendix II: Analysis of women lost to follow-up, Study I (Papers I and II)